

PUBLIC REVIEW DRAFT

SONOMA COUNTY LOCAL COASTAL PLAN

September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

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APPENDIX A: DESIGN GUIDELINES September 2019



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APPENDIX A: DESIGN GUIDELINES

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APPENDIX A: DESIGN GUIDELINES

1. COASTAL DESIGN GUIDELINES

1.1 Development

Development shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

New Development. The following design components shall be incorporated into site planning for new development:

- (a) Open space for important historic and natural features
- (b) Pedestrian use and movement
- (c) Spaces and opportunities for social interaction with community members
- (d) Visibility of access/entrances to buildings and use areas
- (e) Landscaping

Design and Siting. The following guidelines shall be used for design and siting of new structures and development:

- (a) Structures shall be sited and designed to preserve unobstructed broad views of the ocean and minimize visual impacts.
- (b) Development in open fields shall be prohibited.
- (c) In inland valleys, development outside of existing communities shall be located on the edge of the valley or within or behind existing tree stands or groupings, leaving the valley floor and agricultural land open.
- (d) Structures shall be clustered to the extent feasible.
- (e) Structures shall be sited behind or near existing vegetation or topographic relief to screen them from view from public roads and use areas; if not possible, native trees and shrubs which will not grow to block views to the coastline but will provide full screening of structures within 5 years shall be planted.
- (f) New development shall be sited and designed to minimize removing trees. Trees shall be retained to the extent possible. Structures shall be located within or behind wooded areas, tree stands, or tree groupings to screen them from view.

- (g) On ridgelines, pruning or removing tree stands or groupings shall be prohibited if doing so would make structures more visible from public roads and use areas. Removing tree Windbreaks shall be prohibited unless it is necessary to remove diseased trees.
- (h) On hillsides, new structures shall be sited and designed such that they do not project above the hillside or silhouette against the skyline. On ridgelines, development which would project above the ridgeline shall be prohibited.

Development Scale. Development shall be designed to complement and be in scale with the site and the surrounding environment and community.

Building Height. The following criteria shall be used for building height:

- (a) West of State Highway 1: Building height shall be limited to 16 feet. An increase in height to a maximum of 24 feet shall be permitted if (a) the structure is no higher than 16 feet above grade directly across from the building site, and (b) the structure will neither affect views to the ocean or rivers nor be out of character with surrounding structures.
- (b) East of State Highway 1: Building height shall be limited to 24 feet. An increase in height to a maximum of 35 feet shall be permitted if (a) the structure is no higher than 24 feet above grade directly across from the building site, and (b) the structure will neither affect views to the ocean or rivers nor be out of character with surrounding structures.

Minimize Development Impacts. New development shall be sited and designed to minimize the impacts of noise, light, glare, and odors on adjacent properties and the larger community.

Utility Lines. All extensions of utility distribution lines to serve new development shall be placed underground.

Grading and Topography. The following guidelines shall be used for grading/topographic alteration:

- (a) Roads, buildings, and other structural improvements shall be designed and constructed to fit the natural topography.
- (b) Development shall be concentrated on level areas so that steeper hillsides are left undisturbed. Grading and development shall be discouraged on hillsides with a slope of more than 30 percent.
- (c) Grading shall be minimized to the extent necessary to site new structures.
- (d) Grading and construction shall follow the natural contours of the landscape.

- (e) Alteration of natural landforms as a result of grading, cutting, or filling shall be minimized. New development which requires grading, cutting, or filling that would significantly alter or destroy the appearance of natural landforms shall be prohibited.
- (f) On hillsides, structures shall be designed to fit the site rather than altering the natural landforms to accommodate buildings designed for level sites.
- (g) Natural landforms shall be restored as completely as possible after any permitted temporary alteration during construction.

Passive Solar. Passive solar design should be used for new development. Passive solar design involves the use of various techniques in siting and designing new buildings to capitalize on heat and light from the sun and reduce the need for mechanical and electrical systems for internal lighting, heating, and cooling. These techniques shall include placing buildings to maximize solar orientation for both winter heating and summer cooling; placing windows or other openings and reflective surfaces so that during the day natural light provides effective internal lighting (i.e., daylighting); large south-facing windows; natural shading and ventilation; and building materials that absorb heat from the sun and slowly release it to warm the building.

Impervious Surfaces. Paved and other impervious surfaces shall be minimized to allow for infiltration of stormwater to groundwater.

Agricultural Structures. Large agricultural structures shall be sited out of view. Encourage use of designs and exterior finish materials and colors that blend with the natural vegetation.

Exterior Building Material and Finishes. The following guidelines shall be used for exterior finish materials and colors:

- (a) Non-reflective, natural materials and earth colors that blend with the vegetation shall be used on the site unless the building is historic or an historic reproduction, in which case the colors shall be in keeping with the historic style.
- (b) Composition shingle and shake roofs in dark natural or earthen colors compatible with the exterior finish colors of the buildings shall be used.
- (c) Wood or shingle siding shall be used.
- (d) Metal window frames shall not be used unless they are bronze anodized aluminum or baked enamel.
- (e) Dark and non-reflective driveway materials shall be used.

Landscape Design. The following guidelines shall be used for landscaping:

- (a) Landscaping shall be used to integrate the manmade and natural environments and to screen and soften the visual impact of new development.
- (b) Landscaping shall be designed to blend in with the character of the site and area.
- (c) Existing vegetation, topography, rock outcrops, and natural water bodies shall be incorporated into the landscaping plan.
- (d) Native and drought-tolerant plant materials shall be used in landscaping, especially where it is visible from public roads.
- (e) Must meet Water Efficient Landscape Ordinance.
- (h) The following features shall be shown on the landscaping plan: outdoor lighting, signs, trash bins, fencing, utility equipment, paving, and outdoor furniture.
- (i) Landscaping shall be used to screen parking areas from view.
- (j) Planting vegetation west of State Highway 1 which could grow to block views to the coastline shall be prohibited.

Fences. Fences shall be discouraged on property lines. Fences shall be designed to be extensions of the main building, constructed of materials that complement the main building, and to be less than six feet unless they are used for screening service areas or for privacy. Fences are development subject to a coastal development permit and shall not be constructed to obstruct coastal views.

Parking. Parking areas shall be sited and designed so that they are out of view or screened from view. Screening may include planting of trees and shrubs.

Exterior Lighting. Exterior lighting shall be designed to be functional, subtle, and architecturally integrated with the style and exterior finish materials and colors of the buildings. This lighting shall be fully shielded, directed downward, and use bulbs that do not exceed 700 lumens and color temperature less than 3000 Kelvin. Light trespass shall not exceed one lux at the property line when all exterior lighting is operated. Night lighting that would increase existing ambient light levels in Environmentally Sensitive Habitat Areas (ESHAs) shall be prohibited.

1.2 Residential Building Design

The following additional guidelines shall be used for design of residential development:

- (a) Traditional architectural styles of the Sonoma County coast shall be used in older development areas and contemporary styles in newer subdivisions.

- (b) Structures shall be designed to be compatible with the characteristics of the community; and shall be related in size, scale, shape, and style to that of existing adjacent and nearby structures and to natural features.
- (c) Non-reflective, pitched roofs shall be used, and roof slopes shall be related to those on existing adjacent and nearby structures.
- (d) Accessory buildings shall be designed to be consistent with the architecture and exterior finish materials and colors of the main building.

Private Roads and Driveways. Development shall be designed for sharing of private roads and driveways.

1.3 Commercial Building Design

The following additional guidelines shall be used for design of commercial buildings:

- (a) Buildings shall be compatible with the predominant design of existing buildings in the area.
- (b) Building height shall be limited to 24 feet unless a greater height would not have an adverse impact on coastal views and there are overriding considerations.
- (c) Wood or shingle siding and natural or earth colors shall be used.
- (d) Pitched, non-reflective roofs shall be used unless the building is an historic reproduction.
- (e) Exterior lighting shall be functional, subtle, and integrated architecturally with the building style, materials, and colors.
- (f) Parking areas shall be screened from view through siting, design, and landscaping.

Signs. The following guidelines, in addition to coastal sign regulations found in the Coastal Zoning Code, shall be used for signs:

- (a) The use of outdoor signs shall be minimized.
- (b) The number of signs on a site shall be limited to one attached sign per building side which faces the site access road(s).
- (c) Signs shall be designed in terms of location, size, height, shape, color, and illumination so that they relate to and are compatible with the surrounding land uses, complement the design of existing and proposed buildings, and are compatible with nearby conforming signs. Signs shall be designed to be unobtrusive.
- (d) Signs shall be designed to be simple and easy to read.
- (e) Signs shall be designed to be vandal-proof and weather-resistant.

- (f) Signs not attached to buildings shall be of monument style and have landscaping at the base. The maximum height of monument signs shall be six feet (6') above ground level.
- (g) Signs attached to buildings shall be integral to the building design. Attaching signs on towers, spires, roofs, or roof fascias shall be avoided.
- (h) On attached signs, signs comprised of individual letters applied directly to the building surface shall be preferred over attached box or cabinet signs.
- (i) Use of struts, braces, kickbacks, or guy wires to support signs shall be avoided.
- (j) On internally illuminated signs, illumination shall be limited to letters and graphic elements with an opaque background.
- (k) On externally illuminated signs, the source of illumination shall be dark sky compliance and shielded from adjacent roads and properties.
- (l) For multiple occupancy buildings a Master Sign Program shall be developed to promote design consistency and facilitate processing permits.
- (m) Along designated scenic corridors signs shall be for onsite advertising purposed only.

2. BODEGA BAY DESIGN GUIDELINES

2.1 Bodega Bay Core Design Guidelines

New development located within the Bodega Bay Core Area shall be consistent with the Bodega Bay Core Design Guidelines in addition to the Coastal Design Guidelines, and **Policy C-OSRC-4e (Existing LCP Revised)** In the case of conflicts, the Bodega Bay Core Area Design Guidelines shall supersede the Coast Community Design Guidelines.

For the Bodega Bay Core Area (area including Taylor Tract and the planned residential area south of Taylor Tract; State Highway 1; and the area that was proposed for the former State Highway 1 bypass), the following design guidelines shall be used in addition to the Coastal Design Guidelines. In the case of conflicts, the Bodega Bay Core Area Design Guidelines shall supersede the Coast Community Design Guidelines.

Building Siting. Structures shall be sited and designed to take advantage of bay views without blocking bay views of neighboring structures.

Building Height. Building height shall be limited to 16 feet except that in major developments up to 15 percent of the units may exceed the height limit. Height for residential structures is measured as the vertical distance from the average level of the highest and lowest points of that portion of the lot covered by the building to the topmost point of the roof.

Building Design. The following guidelines shall be used for building design:

- (a) The traditional building forms of Sonoma County coast buildings shall be used, including Greek Revival, Salt Box, and simple cottage styles similar to existing homes.
- (b) Pitched roofs shall be used. Flat roofs may be appropriate where compatible with the roofs on existing structures.
- (c) Where a building is between two existing structures, the design of that building should act as a transition between the two existing structures.

Exterior Building Material and Finish. The following guidelines shall be used for exterior finish materials and colors:

- (a) Wood or shingle siding shall be used.
- (b) Painted exteriors in colors similar to those on structures in Bodega Bay shall be used (i.e., rust, red, white, green, beige, brown, gray, yellow, and blue). The Design Review Committee must approve other colors. Natural wood exteriors may

be intermixed with painted exteriors but shall not dominate the new development area.

- (c) Wood windows frames painted in a contrasting but harmonizing color shall be used.

Fences. Fences over three feet high shall be discouraged on property lines. Traditional picket fences shall be encouraged.

Street Width. A minimum width for paved streets shall be encouraged, consistent with circulation, safety, and parking requirements, to provide a sense of continuity between new development and the original town of Bodega Bay.

Bike Paths and Walkways. Separated bike paths and pedestrian walkways shall be required on one side of the street in areas of new development.

Setback Variation. Variation in setbacks shall be encouraged.

Detached Garages. Detached garages shall be encouraged in and adjacent to the Taylor Tract. Single-car garages may be appropriate.

2.2 Bodega Bay Non-Core Design Guidelines

Policy C-OSRC-4d: New development located within Bodega Bay outside of the Bodega Bay Core Area shall be consistent with the following Bodega Bay Non-Core Design Guidelines in addition to the Coastal Design Guidelines. In the case of conflict, these community specific guidelines shall supersede the Coast Community Design Guidelines:

- (1) The exterior of structures shall be designed to reflect the nautical character of the harbor with wooden exteriors, stained or painted white or subdued earth colors.
- (2) For heavy commercial structures, textured metal in subdued colors with proper architectural detailing and landscaping shall be encouraged to add visual interest and soften building lines. **(Existing LCP Revised)**

3. HEIGHT, SITE AND BULK CRITERIA FOR THE SEA RANCH

(Adopted by Board of Supervisors' Resolution #71611, April 20, 1982)

Subsection 30610.6 (e) of the Coastal Act charges the Executive Director with the duty of specifying design criteria for the height, site and bulk of any developments visible from areas where scenic view easements have been established. The purpose of such criteria is to ensure that new development will not substantially detract from the scenic view areas identified in compliance with Subsection 30610.6 (d). Below are the criteria designated pursuant to this new portion of the Coastal Act. Enforcement of these standards shall be the responsibility of the County of Sonoma.

1. Site

- a. Structures should be located upon lots to take maximum advantage of topographical features and existing tree masses. This is particularly true of those lots nearest to Highway One, since a poorly sited structure in close proximity to a public viewing area may have a substantial adverse impact on views to the coast. When sites are designated as 'tree' or 'topo' sites, this means that special attention to the noted condition of the lot shall be incorporated into the design of the project. Similarly, 'frontage' or 'low' site designations indicate that a proposed dwelling must be placed on the identified portion of the lot (generally the point furthest away from Highway One), in order to minimize obstruction of coastal views.
- b. Definitions
 - i. Low Site - Designates lots on which the home shall be sited on the lowest portion of the lot.
 - ii. Frontage Site - Designates lots on which the house shall be sited on the portion of the lot nearest the frontage road.
 - iii. Topo Site - Designates lots on which the home shall be sited in such a manner as to promote shielding of the home from public view by the terrain.
 - iv. Tree Site - Designates lots on which the home shall be sited to promote shielding of the home from public view by hedgerows and other existing trees.

2. Height

Height is measured as follows: From the natural grade on the highest side of the improvement to the highest point of the roof or any projection therefrom.

3. Bulk

Bulk is determined by calculating the gross square footage of the proposed structure or structures (i.e., garages are included). Bulk control is basically intended to reduce visual impacts on the landscape; therefore, different categories have been developed to reflect the degree of exposure of the site under consideration. Bulk limits in each category are as follows:

Category 1: 1250 square feet (highly visually sensitive lots)

Category 2: 1760 square feet (less visually sensitive lots adjacent to Highway One)

Category 3: 2250 square feet

Absent a specific designation of either Category 1 or 2, Category 3 shall apply to all lots west of Highway One.

4. Specific Designations

Specific design criteria have been established using the definitions and policies discussed above for each lot which is both visible from a scenic view easement and subject to a design recommendation in the Commission's Overall Conditions and Findings. Subject to the exception detailed below, houses on sites for which specific design criteria have been established must conform to these designations. The County shall have the responsibility for enforcing these criteria, using whatever review process it deems most effective.

A variance to a height, site and/or bulk designation may be allowed where the County makes a written finding that the house design is consistent with Coastal Act view protection objectives. Such variances, however, shall be subject to the following restrictions:

Height and Bulk - variations in these categories shall not exceed 25% of the height or bulk limit designated for the site.

Siting - alternate siting is permissible where the designated portion of the lot is the only area feasible for installation of a septic system. However, even in this situation the siting of the house shall attempt as far as possible to conform with the site designation.

Specific Height, Site and Bulk Designations

UNIT 1	Block 1	Lots 1-4, 7-9	tree site
	Block 5	Lots 1-5	16' height, Cat 2
	Block 6	Lots 2-5, 7, 8	16' height
	Block 7	Lots 4, 6, 13, 14	tree site
UNIT 7	Block 1	Lots 1, 3-5	16' height
	Block 2	Lots 1, 1, 4-9	frontage site, 16' height, Cat 2
	Block 3	Lots 7-8	16' height
		Lots 1-4, 6-8	tree site
	Block 4	Lots 1-4, 6-8	16' height
	Block 5	Lots 1-4, 12-16	24' height
		Lots 5-7	16' height
UNIT 15		Lots 3-5	16' height
		Lots 6-7	topo site, 16' height
		Lots 9-10	16' height
UNIT 17		Lots 44-46, 48	frontage site, 16' height, Cat 2
		Lots 53-55	16' height
		Lot 56	topo site, 16' height
UNIT 18		Lots 14-15, 18-19	tree sites
		Lots 20-24	low site, 16' height
		Lots 25-28, 30, 32-33, 35	16' height
		Lot 36	24' height
		Lots 39-42	frontage site, 16' height, Cat 2
		Lot 43	16' height
		Lots 44-45	topo site, 16' height
		Lots 46-48	16' height
		Lots 97-99	tree sites, 24' height
		Lots 101-102	frontage site, 16' height, Cat 2
UNIT 21		Lots 1-4	frontage site, 16' height, Cat 2
		Lots 6-9, 12, 14, 16	16' height
		Lots 16, 17, 19-23, 25-27	24' height
		Lots 29-32, 34	16' height
		Lots 36-40	frontage site, 16' height, Cat 2
		Lot 42	tree site, 16' height, Cat 2
		Lots 43-44	frontage site, 16' height, Cat 2
		Lots 45-46	tree site, 24' height
		Lots 52-58	tree sites, 24' height
		Lots 59, 61, 65	16' height
		Lot 68	trees site
		Lots 70, 72-75, 77-83, 85, 87-92	16' height
		Lot 94	24' height

UNIT 21 (cont.)		Lots 95-98, 104-107, 109, 111-117, 119, 120, 123, 125	16' height
		Lots 127-128	16' height
		Lot 130	tree site, 24' height
		Lots 132-141-143	topo site, 24' height
		Lot 146	24' height
		Lot 147	topo site, 16' height
		Lot 148-152	16' height
		Lot 154	frontage site, 16' height
Unit 24		Lot 1	16' height
		Lots 36, 38-42	24' height
		Lots 52-54-56, 62-67, 73-76	16' height
		Lots 78-79	24' height
		Lots 81-87-89	16' height, Category 2
		Lots 95-99, 101-103, 105-112, 114-118, 120, 121, 124-127, 129-131, 133-135	16' height
		Lots 136-148	24' height
		Lots 158, 159	16' height, Category 2
Unit 28		Lot 2	frontage site, 16' height, Category 2
		Lots 4, 6, 7, 9-11	topo site, 16' height, Category 2
		Lots 15-17	16' height
		Lot 19	tree site, 24' height
		Lots 21-23, 25-28, 30-31, 33-44, 48-70, 72-78, 81-97, 99-114, 117-120	16' height
		Lot 124	24' height
		Lot 125	tree site, 24' height
		Lot 126	topo site
		Lots 128-130, 132, 135, 136, 138	tree site, 24' height
		Lots 139, 140	frontage site, 16' height, Category 2
		Lots 141-147	frontage site, 16' height, Category 1
		Lots 148-150	frontage site, 16' height

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APPENDIX B: PUBLIC ACCESS PLAN September 2019



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APPENDIX B: PUBLIC ACCESS PLAN

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APPENDIX B: PUBLIC ACCESS PLAN

THE SEA RANCH NORTH SUBAREA 1 (FIGURE C-PA-1A)

(A-1) Gualala River North Shore Access and Boat Launch

(2001 County LCP reference: page 119; Mendocino County General Plan Coastal Element (1991; Policies 4.12-19, -20, -21 on pages 8-10)

On the northwest side of the Gualala River Highway 1 Bridge in Mendocino County is a short gravel road that leads to the best informal boat launch on the Gualala River Estuary. Commercial kayak/canoe rental operators also use this site. In addition, there are other informal access points on the north shore upstream of the bridge. The Mendocino County Local Coastal Plan also supports conservation of public access at this location.

Owner/Manager:	Private
Existing Status:	Existing and Proposed, Undeveloped
Acquisition Priority:	II
Development Priority:	II
Existing Improvements:	Unknown

Proposed Improvements and Programs:

1. Encourage maximum public access for boat launching and river trail on the north shore.

(A-2) California Coastal Trail: The Sea Ranch North SubArea

(2001 County LCP reference: pages 100 & 163; SB 908; AB 1396)

This section of the California Coastal Trail is a braided trail, including a north-south multiple use bikeway with a pedestrian-only trail closer to the ocean where feasible. There are several sections: the proposed Sea Ranch Bikeway, Gualala Point Regional Park, two public Sea Ranch Coastal Access Trails, and potentially additional routes unidentified at this time.

Owner/Manager:	County Parks, State – Caltrans/Undetermined
Existing Status:	Partially Acquired, Partially Developed
Acquisition Priority:	II
Development Priority:	II

Existing Improvements: Blufftop Trail, Walk-On Beach Trail, select trails in Gualala Point Regional Park

Proposed Improvements and Programs:

1. Designate the proposed Class I Sea Ranch Bikeway, providing safe pedestrian and bicycle facilities across the Gualala River Bridge to the southerly boundary of The Sea Ranch, as the California Coastal Trail through this subarea. See A-6 for specific proposed improvements.
2. Identify the best route from State Highway 1 through the park, to the Blufftop Trail at the southwestern boundary of Gualala Point Regional Park. The trail should be separate from the park driveway. Designate this route as California Coastal Trail. See proposed improvements for Gualala Point Regional Park (A-3).
3. Designate the existing Blufftop, and Walk-On Beach Coastal Access Trails as the California Coastal Trail.
4. Work within the provisions of the California State Resources Code (Bane Bill), and with The Sea Ranch community and other stakeholders to identify a continuous California Coastal Trail between Walk-On Beach Access Trail and the southerly boundary of the subarea.

(A-3) Gualala Point Regional Park

(2001 County LCP reference: #1, page 70; #4 page 71; and page 95)

Gualala Point Regional Park is located adjacent to the Gualala River on the northern edge of Sonoma County and The Sea Ranch. The park provides access to the coast, coastal terrace, Gualala River and estuary. Steelhead and rock-fishing, boating, picnicking, nature study, and whale watching are popular activities.

Owner/Manager: County Parks

Existing Status: Existing, Developed

Acquisition Priority: See A-4

Development Priority: III

Existing Improvements: 3.1-mile trail system, 21 vehicle and 8 walk-in campsites, informal picnic facilities, visitor center, restrooms, dump station, 104 day use parking stalls

Proposed Improvements and Programs:

1. Replace the Beach Restroom. The design should be consistent with the Visitor Center restroom.
2. Connect the park office and park residences to the existing park sewer system per existing Gualala Community Service District agreement when funding is available.

3. Upgrade the park office for accessibility per adopted Countywide ADA Transition Plan.
4. Study the feasibility of providing a paddle craft launch site to the Gualala River.
5. Identify the California Coastal Trail from State Highway 1 through the park to the Blufftop Trail. Develop new trail if needed to provide off-road connectivity and designate as California Coastal Trail once continuous. Install California Coastal Trail signage.

(A-4) Gualala Point Regional Park Expansion

(2001 County LCP reference: #4, page 71 & page 95; 2020 County General Plan)

Scenic redwood groves border the Gualala River from Gualala Point Regional Park and continuing towards upstream. Fishermen, boaters, and other day use visitors regularly use the existing informal trails on private property adjacent to the Gualala River. The Gualala River is one of the County's three largest watersheds and supports critical fisheries and other critical natural resources. The proposed park expansion includes the "Forest Trail" and "Fishing Trail" as proposed in previous County and coastal plans and provides the launch and landing sites to support the water trail. In 2016, the Sonoma County Agricultural Preservation & Open Space District, County Parks, Sonoma Land Trust, Conservation Fund, and other agency and non-profit partners have collaborated on a high priority acquisition of the subject lands from the property owner, to in part support the proposed Gualala Point Regional Park Expansion and Gualala River Water Trail (A-5), but were unsuccessful.

Owner/Manager:	Private/Proposed County
Existing Status:	Proposed, May Be Prescriptive
Acquisition Priority:	I
Development Priority:	II
Existing Improvements:	Unknown

(A-5) Gualala River Water Trail

(2001 County LCP reference: #4, page 71 & page 95; 2020 County General Plan)

The Gualala River Water Trail is a water-based route for non-motorized recreational boating that is anchored by land based launch sites, camping, and picnicking facilities. Water trails provide educational and scenic experiences and are designed to accommodate boaters of all ages and abilities. With an integrated system of facilities

and informational signs, good water trail programs encourage minimum-impact use and emphasize stewardship of the aquatic ecosystem and historic features.

The Sonoma County Agricultural Preservation & Open Space District, County Parks, Sonoma Land Trust, Conservation Fund, and other agency and non-profit partners are collaborating on a high priority acquisition of the subject lands from the property owner, to in part support the proposed Gualala Point Regional Park Expansion (A-4) and Gualala River Water Trail.

Owner/Manager: Private/Proposed County
Existing Status: Proposed, May Be Prescriptive
Acquisition Priority: I
Development Priority: II
Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the Gualala River Water Trail to identify an integrated system of facilities and programs to promote increased safe and responsible maximum public access to the Gualala River. Acquire easements or fee title from willing sellers along the main stem and South Fork of the Gualala River.
2. Amend the park master plan to address the water trail and expansion and support facilities. Depending upon the size and characteristics of the available land, camping opportunities should be evaluated.

(A-6) Sea Ranch Bikeway

(2001 County LCP reference: pages 163 &166; 2010 Bikeways Plan Project)

The proposed Class I Bikeway connects the Sea Ranch Coastal Access Trails, Gualala Point Regional Park, The Sea Ranch community, and the community of Gualala. The Class I Bikeway will improve circulation, recreational opportunities, and safety. The Sonoma County Bicycle & Pedestrian Advisory Committee voted on October 20, 2010 to include the project in this Local Coastal Plan.

The approximately 600-foot long Gualala River Highway 1 Bridge has a narrow walkway on the side and has no shoulder or striped bike lanes. The bridge is a necessary link in the California Coastal Trail and is Project 204 in the County Bikeways Plan.

Owner/Manager: Caltrans/Undetermined
Existing Status: Proposed
Acquisition Priority: II

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Require Caltrans to provide safe and accessible pedestrian and bicycle facilities by retrofit or during bridge replacement. The pedestrian and bicycle facilities should extend south to the intersection at Highway 1 at Gualala Point Regional Park and The Sea Ranch golf course.
2. Locate the Class I Bikeway within Caltrans right-of-way as much as feasible. Pursuant to the Bane Bill section of the Public Resources Code, acquire easements parallel to Highway 1 for the bikeway if needed and when funding is available.
3. Construct the bikeway. Consider designating it as the California Coastal Trail to provide an alternative route to the other public pedestrian-only trails closer to the ocean.

(A-7) Coastal Ridge Trail

(2003 Draft County ORP: Trail AB)

This multiple use trail begins at the Gualala Point Regional Park and the Gualala River and connects to the trail system at Salt Point State Park. The proposed trail would generally follow the ridge between the ocean and the South Fork of the Gualala River.

Owner/Manager: Undetermined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the feasibility of the trail to determine if the project is viable. Work with willing sellers to acquire easement access rights where required. If necessary, manage public access within timber production zones to ensure compatibility within the land use type.

(A-8) Blufftop Sea Ranch Access Trail

(2001 County LCP reference: #5, page 71)

Access to Blufftop Trail and Walk-On Beach includes a 30-foot wide vehicular accessway to a parking area in Unit 34-A of The Sea Ranch for 10 cars; a 15-foot wide pedestrian accessway from the parking area west to the Blufftop Trail; and a 15-foot wide

pedestrian easement beginning at the southern boundary of Gualala Point Regional Park and continuing for approximately three miles in a southern direction to the sandy beach at the northern end of Unit 28 just north of Walk-On Beach, together with a 15-foot wide pedestrian easement to provide a connection to Walk-On Beach to the south.

Erosion closed the trail in 2003 just south of the intersection of Walk-On Beach and in 2004 a study was initiated to evaluate options to reopen the public access route. The County obtained a license agreement from The Sea Ranch for a temporary alignment in two places that uses existing private trails to bypass the eroded areas. The license agreements are revocable, and long-term options to protect public access should continue to be studied and pursued if feasible.

Owner/Manager:	County Parks (Easement)
Existing Status:	Existing, Dedicated, Developed
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	3-mile trail, restroom, 10 day use parking spaces

Proposed Improvements and Programs:

1. Select alternatives for implementation in the Blufftop Coastal Access Trail Study.
2. Acquire easements or license agreements from willing sellers if needed.
3. Construct improvements to reopen trail.

(A-9) The Sea Ranch Recreation Facilities

(The Sea Ranch Comprehensive Environmental Plan 2013)

The Sea Ranch North includes four undeveloped community recreation areas and the following developed community recreation areas: 1) Del Mar Center, which consists of a community hall, meeting rooms, kitchen, pool, tennis courts, sauna, community flower garden, and picnic area; 2) One-Eyed Jack's, which consists of a playground, picnic tables, barbeque area, and volleyball and petanque courts; 3) Dog Park; and 4) Children's Play Park. These facilities are only available for use by The Sea Ranch Association residents and their guests and are not publicly accessible.

Owner/Manager:	Private
Existing Status:	Existing, Developed
Acquisition Priority:	None
Development Priority:	III

Existing Improvements: see description above

Proposed Improvements and Programs:

1. Support development of a publicly accessible commercial area in the vicinity of the golf course clubhouse, as shown on the 1982 Amended Precise Development Plan.

(A-10) Salal Sea Ranch Access Trail

(2001 County LCP reference: #2, page 70)

The trailhead is one-quarter mile from Gualala Point Regional Park, south on State Highway 1. The trail connects to the Blufftop Trail and to a limited pocket cove at the beach. The accessible beach area ranges from nearly non-existent to up to 500 feet in length at the lowest tide. Parking is available at The Sea Ranch Golf Course, which is publicly accessible. Erosion from surface drainage routinely damages the trail and increases the need for maintenance.

Owner/Manager: County Parks (Easement)

Existing Status: Existing, Dedicated, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.75-mile trail, bridges

Proposed Improvements and Programs:

1. Investigate options of continuing to provide a safe, low-maintenance trail to access the Bluff Top Trail.

(A-11) Del Mar Landing Ecological Reserve

(2001 County LCP reference: #3, page 70)

An access easement has been dedicated to the State Department of Fish and Wildlife to provide access to the Del Mar Ecological Reserve. The Reserve protects endangered species and includes the tidelands and submerged lands near Del Mar Point. No formal trail has been developed, and access should remain limited due to the fragile nature of the Reserve. Due to low intensity use, the restroom and parking facilities for the Gualala Point Regional Park are sufficient to serve this informal trail.

Owner/Manager: State – Fish and Game (Easement)

Existing Status: Dedicated, Undeveloped

Acquisition Priority: None

Development Priority: II

Existing Improvements: None

Proposed Improvements and Programs:

1. Develop a public trail from Highway 1 to the Reserve. Due to low intensity use, restroom and parking facilities for the Salal Trail should be sufficient to serve this trail.
2. Develop a procedure for obtaining access permits.

(A-12) Walk-On Beach Sea Ranch Access Trail

(2001 County LCP reference: #5, page 71)

This coastal access trail includes a parking area in Unit 34-A of The Sea Ranch west of State Highway 1, north of Leeward Way; and a 15-foot wide pedestrian trail over the common areas, crossing Leeward Road and continuing west to the Blufftop Sea Ranch Access Trail. Walk-On Beach is accessed by traveling south for approximately 500 feet on Blufftop Trail.

Erosion closed the trail in 2003 just south of the intersection of Walk-On Beach and Blufftop Trail. In 2004 a study was initiated to evaluate options to reopen the public access route. The County obtained a license agreement from The Sea Ranch Association for a temporary alignment in two places that uses existing private trails to bypass the eroded areas. The license agreements are revocable, and long-term options to protect the public access should continue to be studied.

Owner/Manager: County Parks (Easement)

Existing Status: Existing, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.4-mile trail, 10-day use parking spaces, restroom

Proposed Improvements and Programs:

1. See Blufftop Sea Ranch Access Trail Proposed Improvements and Programs to reestablish access to Walk-On Beach.

THE SEA RANCH SOUTH SUBAREA 2 (FIGURE C-PA-1B)

(B-1) California Coastal Trail: The Sea Ranch South SubArea

(SB 908; AB 1396)

The California Coastal Trail does not currently exist through this SubArea. The Bane Bill prohibits requiring the dedication of land in The Sea Ranch for additional public access not identified in that legislation. Senate Bill 908, Assembly Bill 1396, and other legislation direct the state to develop the California Coastal Trail as a continuous trail primarily for pedestrians as close to the ocean as feasible.

Owner/Manager: Undetermined/Undetermined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: None

Proposed Improvements and Programs:

1. Work within the provisions of the Bane Bill and with The Sea Ranch community and other stakeholders to identify a continuous California Coastal Trail through the entire The Sea Ranch South SubArea. Analyze the potential for designating The Sea Ranch Bikeway and offers to dedicate an easement at The Sea Ranch Lodge, as part of the California Coastal Trail.
2. If funding is available, acquire easements if needed and construct trail.

(B-2) Sea Ranch Bikeway

(2001 County LCP reference: pages 163 &166, Bane Bill)

The proposed Class I Bikeway connects the Sea Ranch Coastal Access Trails, Gualala Point Regional Park, The Sea Ranch community, and the community of Gualala. The Class I Bikeway will improve circulation, recreational opportunities, and safety.

Owner/Manager: Caltrans, Private/ Caltrans or County

Existing Status: Proposed

Acquisition Priority: II

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Identify the best alignment for The Sea Ranch Bikeway, using Caltrans right-of-way as much as possible. If needed, pursuant to the Bane Bill, acquire easements parallel to Highway 1 for a Class I Bikeway, separated from motorized traffic, when funding is available.
2. Construct the bikeway. Consider designating it a multiple use route of the California Coastal Trail.

(B-3) Coastal Ridge Trail

(2003 Draft County ORP: Trail AB)

This multiple use trail begins at the Gualala River main stem and connects to the trail system at Salt Point State Park. The proposed trail would generally follow the ridge between the ocean and the South Fork of the Gualala River.

Owner/Manager: Undetermined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the feasibility of the trail to determine if the project is viable. Work with willing sellers to acquire easement access rights where required. If necessary, manage public access within timber production zones to ensure compatibility within the land use type.

(B-4) Shell Beach Sea Ranch Access Trail

(2001 County LCP reference: #6, page 71)

The Shell Beach Sea Ranch Access Trail is a pedestrian trail that connects State Highway 1 to Shell Beach in Unit 24 of The Sea Ranch. A fifteen-foot wide trail easement connects to both the northern and southern portions of Shell Beach.

Owner/Manager: County Parks (easement)

Existing Status: Dedicated, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.5-mile trail, restroom, 6 day use parking spaces

Proposed Improvements and Programs: None

(B-5) Stengel Beach Sea Ranch Access Trail

(2001 County LCP reference: #7, page 72)

The Stengel Beach Sea Ranch Access Trail is a pedestrian trail on a 15-foot wide easement that connects Highway One with Stengel Beach at the intersection of Units 21 and 36A.

Owner/Manager: County Parks (easement)

Existing Status: Dedicated, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: 0.2-mile trail, restroom, 10 day use parking spaces

Proposed Improvements and Programs:

1. Add accessible picnic tables at the top of the stairs.

(B-6) The Sea Ranch Recreation Facilities

(The Sea Ranch Comprehensive Environmental Plan 2013)

The Sea Ranch South includes ten undeveloped community recreation areas and the following developed community recreation areas: 1) Moonraker Recreation Center, which consists of a pool, tennis court, and sauna; 2) Ohlson Ranch Center, which consists of meetings room, library, kitchen, pool, tennis courts, basketball and volleyball courts, sauna, picnic tables, and native plant demonstration garden; 3) Knipp-Stengel Bar, which consists of a meeting hall and theatre; 4) Hot Spot, a river swimming area with picnic tables and a barbeque area; 5) Equestrian Center for horse boarding including a riding ring, tack room, and pasture; and 6) Airstrip including private hangars. These facilities are only available for use by The Sea Ranch Association residents and their guests and are not publicly accessible.

Owner/Manager: Private

Existing Status: Existing, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: see description above

Proposed Improvements and Programs:

1. Support development of a publicly accessible commercial area in the vicinity of the golf course clubhouse, as shown on the 1982 Amended Precise Development Plan.

(B-7) Pebble Beach Sea Ranch Access Trail

(2001 County LCP reference: #8, page 72)

The Pebble Beach Sea Ranch Access Trail is a pedestrian trail on a 15-foot wide easement that connects Highway 1 in Unit 17 with Pebble Beach.

Owner/Manager: County Parks (easement)
Existing Status: Dedicated, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: 0.3-mile trail, restroom, 4 day use parking spaces
Proposed Improvements and Programs: None

(B-8) Black Point Beach Sea Ranch Access Trail

(2001 County LCP reference: #9, page 73)

The Black Point Beach Sea Ranch Access Trail includes a parking area and a 15-foot wide pedestrian easement adjoining The Sea Ranch Lodge to Black Point Beach. A staircase to the beach provides access to the beach. The access trail and parking area will be relocated as part of an approved expansion of The Sea Ranch Lodge. As part of the Conditions of Approval, a connecting trail easement to Black Point was required. See B-9 for additional detail.

Owner/Manager: County Parks (easement)
Existing Status: Dedicated, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: 0.2-mile trail, staircase, restroom, 10 day use parking spaces

Proposed Improvements and Programs:

1. Maintain scenic views from the existing or proposed relocated parking area and trail.
2. Require new leach fields to be set back from the relocated parking area and trail by a minimum of 50 feet.

3. Require adequate staff and visitor parking to avoid Sea Ranch Lodge guests from using the public access parking as overflow.
4. Create a new public parking area prior to closing the old parking area and trail.
5. Once the Black Point Loop Trail (B-9) is constructed, designate it and the Black Point Beach Sea Ranch Access Trail as the California Coastal Trail.

(B-9) Black Point Loop Trail

(2001 County LCP reference Figure V-1: None, GP2020 reference Policy OSRC-17d)

In 2009 Sonoma County approved the expansion of The Sea Ranch Lodge. Article 73 of Conditions of Approval for PLP 08-0011 requires The Sea Ranch Lodge to dedicate an easement for a loop trail that extends from the existing Black Point Beach Access Trail to Black Point.

Owner/Manager:	Public/Private
Existing Status:	Offer to Dedicate, Undeveloped
Acquisition Priority:	I
Development Priority:	II
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Prior to the issuance of grading or building permits for the Meadow Cluster or North Cluster, the Applicant shall make an Offer of Dedication to the Sonoma County Regional Parks Department for a Black Point loop trail easement that is conceptually depicted in Attachment "K" of the Sea Ranch Lodge Expansion Initial Study. The Offer of Dedication shall be placed in escrow and released to Regional Parks simultaneously with the issuance of certificates of occupancy for the Meadow Cluster or North Cluster. Prior to occupancy of the North Cluster or Meadow Cluster, the Applicant shall cooperate with Regional Parks and the Kashia Pomo Tribe to make any needed field adjustments to the loop trail that provides safe access to the westernmost end of Black Point from the existing Black Point Trail Easement.
2. Construct the trail and provide signage.
3. Once complete, designate the Black Point Loop Trail and the Black Point Beach Sea Ranch Access Trail as the California Coastal Trail.

(B-10) Black Point Connector Trail

(2001 County LCP reference: None)

In 2009 the owner of Sea Ranch Lodge offered Coastwalk, a statewide nonprofit organization promoting the California Coastal Trail, an offer to dedicate a trail easement across The Sea Ranch Lodge property to a qualified government or nonprofit agency. The trail easement would connect the northern and southern boundary of the Sea Ranch Lodge property to provide a continuous California Coastal Trail. This offer is contingent on several conditions documented in an agreement before the trail easement can be recorded.

Owner/Manager:	Public/Private/Undetermined
Existing Status:	Offer to Dedicate, Undeveloped
Acquisition Priority:	I
Development Priority:	II
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Once the conditions of the agreement between The Sea Ranch Lodge and Coastwalk have been met, encourage an appropriate recreation provider to work with Coastwalk and the Sea Ranch Lodge to record a trail easement including provisions for realignment for coastal bluff retreat and temporary alignments due to Lodge events.
2. Construct the trail and provide signage.
3. Designate the continuous trail through Sea Ranch Lodge property as the trail as the California Coastal Trail.

STEWARTS POINT/HORSESHOE COVE SUBAREA 3 (FIGURE C-PA-1C)

(C-1) California Coastal Trail: Sea Ranch to Salt Point State Park

(SB 908; AB 1396)

The approximate 6-mile distance through this SubArea between the southerly terminus of Sea Ranch and the northerly boundary of Salt Point State Park has been identified as an important and highly scenic connection for the California Coastal Trail by the State Coastal Conservancy and other park and conservation agencies. This area includes stunning coastal views, pristine coves, unique rock formations, and historic features. An approximately 1-mile long public trail easement was acquired in 2015 along the 6-mile long area.

Owner/Manager: Private / County Parks (easement)

Existing Status: Partially Acquired, Proposed

Acquisition Priority: I

Development Priority: I

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Work with willing land owners to acquire easements or fee title to locate the California Coastal Trail as a continuous trail, separate from motorized traffic, from the southerly boundary of Sea Ranch to the northerly boundary of the public trail easement on Stewarts Point Ranch.
2. Develop the Coastal Trail on the Stewarts Point Ranch Trail Easement. Dedicate as the Coastal Trail. See Proposed Improvements for Stewarts Point Ranch and Cove (C-3). Work with willing land owners to acquire easements or fee title to locate the California Coastal Trail as a continuous trail, separate from motorized traffic, from the southerly boundary of Stewarts Point Ranch to the northerly boundary of the public trail easement on the Kashia Coastal Reserve.
3. Assess the need for trailhead and interpretive facilities at the time of dedication. Develop the trail.

(C-2) Coastal Ridge Trail

(2001 County LCP reference: none; 2003 Draft County ORP: Trail AB)

This multiple use trail begins at the Gualala River main stem and connects to the trail system at Salt Point State Park. The proposed trail would generally follow the ridge between the ocean and the South Fork of the Gualala River.

Owner/Manager: Undetermined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the feasibility of the trail to determine if the project is viable. Work with willing sellers to acquire easement access rights where needed. If needed, mitigate public access within timber production zones including temporary trail reroutes to ensure compatibility within the land use type.

(C-3) Stewarts Point Ranch & Cove

(2001 County LCP reference: #10, page 73)

The historic Stewarts Point Ranch includes the land between Sea Ranch and Salt Point State Park, much of the Stewarts Creek watershed, a portion of the South Fork Gualala River, and a very significant old growth redwood stand outside of the Coastal Zone. Many recreation and conservation entities have long identified the property as a priority location for recreation and conservation. This area has been one of the longest stretches of coast without any public access and a highly desirable destination for nature lovers and divers. The historic ranch is now in several different ownerships.

The Save the Redwoods League purchased 871 acres of the historic Stewarts Point Ranch, and in 2017 sold a conservation easement and public trail easement. They intend to sell the ranch to a private buyer while Sonoma County Regional Parks will develop the public access trail. The trail easement connects the north and south border of the property, and has a short connector trail to a small parking area.

Owner/Manager: Private / Sonoma County Regional Parks (easement)

Existing Status: Acquired, Undeveloped

Acquisition Priority: None

Development Priority: I

Existing Improvements: Ranch roads, barns, private boat launch

Proposed Improvements and Programs:

1. Plan and develop the California Coastal Trail and small staging area on the existing public trail easement from the northern edge of the historic Stewart's Point townsite to the property boundary, approximately 0.8 miles to the north. Develop the Coastal Trail from the southern property boundary to the planned staging area. Develop the Coastal Trail from planned staging area to the northern property boundary once additional property rights are acquired from willing sellers to the north.
2. Identify the California Coastal Trail alignment through the historic ranch as a continuous trail to connect to the existing public access easement, separate from the motorized traffic and consistent with Coastal Commission's Coastal Trail siting guidelines. Acquire easements from willing sellers and construct trail.
3. Encourage the retention of active timber management on the historic Stewart's Point Ranch while providing for resource protection and maximum public access.
4. Encourage the retention of grazing in a manner that maximizes ecological health, supports the local agricultural economy, and provides for compatible recreation opportunities. Provide public education about recreation within grazing areas.

(C-4) Northern Red Box Coastal Access Trail 1: Fisherman Bay

(2001 County LCP reference: #11, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between The Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes where day use visitors dropped 1-2 dollars into when they visited before crossing the fence and walking an informal trail to the coast. The northern group of these coastal access trails had five locations. Fisherman Bay is the most northern of the eight and contains a scenic double cove.

Owner/Manager: Private

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: II

Development Priority: II

Existing Improvements: None

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to the coast at Fisherman Bay through purchase of fee title or easement from a willing property owner.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with retaining grazing to maximize ecological health, supports the local agricultural economy, and provides for compatible recreation opportunities. Provide public education about recreation within grazing areas.

(C-5) Northern Red Box Vertical Coastal Access Trail 2 & 3: Sandy Point

(2001 County LCP reference: #11, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between The Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped 1-2 dollars into when they visited before crossing the fence and walking an informal trail to the coast. The northern group of these coastal access trails had five locations. The second and third most northern red box access trail was located near Sandy Point.

Owner/Manager:	Private
Existing Status:	Proposed, May Be Prescriptive
Acquisition Priority:	II
Development Priority:	II
Existing Improvements:	None

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to the coast at Sand Point through purchase of fee title or an easement from willing property owners.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with retaining grazing to maximize ecological health, supports the local agricultural economy, and provides for compatible recreation opportunities. Provide public education about recreation within grazing areas.

(C-6) Northern Red Box Coastal Access Trail 4: Unnamed Access Trail

(2001 County LCP reference: #11, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between The Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped one to two dollars into when they visited before crossing the fence and walking an informal trail to the coast. Prescriptive rights may exist. The northern group of these coastal access trails had five locations. The fourth most northern red box access trail was located approximately a quarter mile south of Sandy Point and a quarter mile north of an unnamed gulch.

Owner/Manager:	Private
Existing Status:	Proposed, May Be Prescriptive
Acquisition Priority:	II
Development Priority:	II
Existing Improvements:	Unknown

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to the coast at the coastline halfway between Sandy Point and an unnamed gulch to the south through purchase of fee title or easements from willing sellers.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with grazing to maximize ecological health and to support the local agricultural economy. Provide public education about recreation in grazing areas.

(C-7) Northern Red Box Coastal Access Trail 5: Unnamed Gulch

(2001 County LCP reference: #11, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between The Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped 1-2 dollars into when they visited before crossing the fence and walking an informal trail to the coast. Prescriptive rights may exist. The fifth most northern red box coastal access trail was located at an unnamed gulch at the south end of a broad sandy cove, approximately half of a mile south of Sandy Point.

Owner/Manager: Private
Existing Status: Proposed, May Be Prescriptive
Acquisition Priority: II
Development Priority: II
Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to the unnamed gulch at the Sandy Cove coast at the coastline halfway between Sandy Point and an unnamed gulch to the south through purchase of fee title or easements from willing sellers.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with grazing to maximize ecological health and support the local agricultural economy. Provide public education about recreation in grazing areas.

(C-8) Southern Red Box Coastal Access Trail 1: Mac's Cove

(2001 County LCP reference: #11, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped 1-2 dollars into when they visited before crossing the fence and walking an informal trail to the coast. The southern group of these coastal access trails had three locations. The northerly red box coastal access trail in the southern group was located at Mac's Cove, a third of a mile long cove just north of Rocky Point.

Owner/Manager: Private
Existing Status: Proposed, May Be Prescriptive
Acquisition Priority: II
Development Priority: II
Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to Rocky Point through purchase of fee title or easement from a willing seller.
2. Assess the need for related facilities at the time of dedication.

3. Provide maximum public access in a manner compatible with grazing to maximize ecological health and support the local agricultural economy. Provide public education about recreation in grazing areas.

(C-9) Southern Red Box Coastal Access Trail 2: Rocky Point

(2001 County LCP reference: #12, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped 1-2 dollars into when they visited before crossing the fence and walking an informal trail to the coast. The southern group of these coastal access trails had three locations. The middle coastal access trail of this group was located at Rocky Point, a scenic promontory.

Owner/Manager:	Private
Existing Status:	Proposed, May Be Prescriptive
Acquisition Priority:	II
Development Priority:	II
Existing Improvements:	Unknown

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to Rocky Point through purchase of fee title or easement from willing sellers.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with grazing to maximize ecological health and support the local agricultural economy. Provide public education about recreation in grazing areas.

(C-10) Southern Red Box Coastal Access Trail 3: Small Cove

(2001 County LCP reference: #12, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped one to two dollars into when they visited before crossing the fence and walking an informal trail to the coast. The southern group of these coastal access trails had three locations. The southerly-most

red box coastal access trail was located at a sheltered, unnamed small cove, on the south side of Rocky Point.

Owner/Manager:	Private
Existing Status:	Proposed, May Be Prescriptive
Acquisition Priority:	II
Development Priority:	II
Existing Improvements:	Unknown

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to the unnamed small cove through purchase of fee title or easement from willing sellers.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with retaining grazing to maximize ecological health, supports the local agricultural economy, and provides for compatible recreation opportunities. Provide public education about recreation within grazing areas.

SALT POINT SUBAREA 4 (FIGURE C-PA-1D)

(D-1) California Coastal Trail: Kashia Coastal Reserve to Ocean Cove

(2001 County LCP reference: page 100 & #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The Coastal Trail through the Salt Point SubArea consists of an approximately 1-mile trail easement held by County Parks on the Kashia Coastal Reserve Salt Point State Park has over 9 miles coastline. The California Coastal Trail is partially identified and developed, although informal trails connect the majority of the length.

Owner/Manager: State Parks

Existing Status: Partially Developed

Acquisition Priority: None

Development Priority: I

Existing Improvements: Several trails, restrooms, and parking areas

Proposed Improvements and Programs:

1. Complete plans to align the California Coastal Trail as a continuous trail through the entire length of Salt Point SubArea. Dedicate as the Coastal Trail. See Proposed Improvements for Kashia Coastal Reserve Coastal Trail (D-2) and Salt Point State Park Unit (D-3). Develop the trail.

(D-2) Kashia Coastal Reserve Coastal Trail

(2001 County LCP reference: #13, page 74)

In 2016, the Trust for Public Lands acquired a 688-acre ranch adjacent to Salt Point State Park which includes Northern Horseshoe Cove. The land is the ancestral home of the Kashia Band of Pomo Indians of the Stewarts Point Rancheria. The purchase restores ownership of coastal lands to the Kashia which will manage the property. Public access to a future section of the California Coastal Trail was a condition of the acquisition. Sonoma County Regional Parks holds a trail easement along the western side of Highway 1 from Salt Point State Park to the ranch boundary, approximately 1 mile to the north. The trail easement includes a small parking area. The property contains vital coastal habitat, including forest and riparian woodlands, coastal meadows, and tide pools.

Owner/Manager: Kashia Band of Pomos / Sonoma County Regional Parks (easement)

Existing Status: Acquired, Undeveloped

Acquisition Priority: None

Development Priority: I

Existing Improvements: None

Proposed Improvements and Programs:

1. Work with the Kashia Band of Pomos and other stakeholders to plan, develop, and open the Kashia Coastal Reserve section of California Coastal Trail. Work with Caltrans to secure an encroachment permit to locate the Coastal Trail within the Highway 1 right of way only where bluff erosion and a deep ravine provides no other option.
2. Work with the Kashia Band of Pomos and other stakeholders to create interpretive signage and programs.
3. Work with State Parks and Caltrans to connect the Kashia Coastal Reserve Coastal Trail to the planned State Park staging area approximately a quarter mile south of the Salt Point State Park boundary.

(D-3) Salt Point State Park Unit

(2001 County LCP reference: #7, page 72)

The 5,684-acre Salt Point State Park has over six miles of coastline, rocky promontories, panoramic views, kelp-dotted coves, unique geologic formations, broad coastal prairies terraces, forested hills, and pygmy forests. Popular activities include picnicking, hiking, horseback riding, mountain biking, fishing, skin and scuba diving, and camping.

The General Plan for Salt Point State Park was adopted in 1976.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: 20 miles of trail, 109 vehicle campsites, 1 group campsite, 10 hiker-biker campsites, 20 walk-in campsites, restrooms, day use parking

Proposed Improvements and Programs:

1. Update the park's 1976 General Plan. Evaluate the need for additional camping facilities.

2. Implement the planned trail realignment and related improvements for the California Coastal Trail and trailhead support facilities through Salt Point State Park.
3. Consider restoration or relocation of the environmental campground that was destroyed by fire.
4. Encourage the expansion of Salt Point State Park to the northeast and east to expand recreational opportunities and support resource protection.
5. Consider designation of a portion of the area to the east of Highway 1 as a State wilderness.
6. See individual proposed improvements for specific improvements such as parking, restrooms, and trails.

(D-4) Salt Point State Park – Horseshoe Cove and Horseshoe Point

(2001 County LCP reference: #14, page 74)

Two steep trails lead to the southern half of Horseshoe Cove, and one trail leads to Horseshoe Point on the coastal terrace.

Owner/Manager: State Parks
Existing Status: Dedicated, Partially Developed
Acquisition Priority: None
Development Priority: III
Existing Improvements: Informal trails

Proposed Improvements and Programs:

1. Develop a day use parking area and a trailhead for the California Coastal Trail. Provide trail connections to the north and south.
2. Improve access to the cove if feasible.

(D-5) Salt Point State Park – Deadman Gulch

(2001 County LCP reference: #15, page 75)

Coastal access along Deadman Gulch is available, and a mid-terrace trail connects this coastal access trail to Highway 1 near Fisk Mill Cove.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None

Development Priority: III
Existing Improvements: 2-mile trail
Proposed Improvements and Programs:

1. Develop other interconnecting trails and shoreline access between Horseshoe Cove and Fisk Mill Cove. Construct bridge crossing for the California Coastal Trail.

(D-6) Salt Point State Park – Kruse Ranch Buildings

(2001 County LCP reference: #19, page 104)

The historic Kruse Ranch buildings include the Kruse Barn, old Wells Fargo office, hotel and store and are adjacent to Highway 1. There is currently no public access.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: III
Existing Improvements: Historic structures

Proposed Improvements and Programs:

1. Reconstruct the historic Kruse Barn, Wells Fargo office, hotel, and store structures subject to research on authenticity. Pursue adaptive reuse of these structures for interpretive facility or as a youth hostel. Relocate the trailer out of sight at the proposed park support service area to the south; or relocate it out of view of Highway 1 and use it as a park residence.
2. Develop trail connections within State lands from the historic structures to existing trails to the north, south and east.

(D-7) Salt Point State Park – Fisk Mill Cove

(2001 County LCP reference: #16, page 75)

A vertical coastal access trail from Highway 1 through a forested area leads to the rocky Fisk Mill Cove. The trail also connects to a Salt Point State Park blufftop trail that is part of the California Coastal Trail, and leads to Stump Beach to the south.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: III

Existing Improvements: Barbeques, picnic tables, restrooms, potable water, vista overlook, 30+ day use parking spaces

Proposed Improvements and Programs:

1. Realign and reconstruct the vertical access trails to the beach, and develop a fully accessible trail that connects to the existing Salt Point State Park Blufftop Trail as part of the California Coastal Trail. Relocate and reconstruct bridge crossings for the Coastal Trail.

(D-8) Kruse Rhododendron State Natural Reserve

(2001 County LCP reference: page 96)

Established in 1933, the 317-acre Kruse Rhododendron State Natural Reserve contains second-growth redwood, Douglas fir, grand firs, tanoaks, and an abundance of rhododendrons. Over the last several decades, Salt Point State Park has expanded to the western and southern boundaries of Kruse Rhododendron State Natural Reserve.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 5-mile pedestrian and equestrian trail, 10 day use parking spaces

Proposed Improvements and Programs:

1. Manage the vegetation succession to promote spring time Rhododendron displays.

(D-9) Salt Point State Park – Stump Beach

(2001 County LCP reference: page 96)

A coastal access trail from State Highway 1 through a forested area leads to Stump Beach, a popular sandy beach. The trail also connects to a Salt Point State Park Blufftop Trail that is part of the California Coastal Trail.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.5-mile trail, picnic tables, restroom, day use parking

Proposed Improvements and Programs: None

(D-10) Salt Point State Park – Gerstle Cove

(2001 County LCP reference: page 96)

Gerstle Cove is the largest use area within the park. Gerstle Cove provides access to the Gerstle Cove Marine Reserve, the first underwater park established in California for the complete protection of marine resources.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Visitor center, boat launch, day use parking

Proposed Improvements and Programs: None

TIMBER COVE/ FORT ROSS SUBAREA 5 (FIGURE C-PA-1E)

(E-1) California Coastal Trail: Ocean Cove to Fort Ross State Historic Park

(2001 County LCP reference: page 100, #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The California Coastal Trail is undefined through the north portion of this SubArea. State Parks is planning a realignment of the Coastal Trail through Fort Ross State Historic Park. The environmental document for the project has been adopted, and project permits will be applied for when funding becomes available.

Owner/Manager:	Private, State/ Private, County
Existing Status:	Required and Proposed Dedication, May Be Prescriptive
Acquisition Priority:	I
Development Priority:	II
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Complete the realignment and improvements to the California Coastal Trail through Fort Ross State Historic Park including new trailheads, new trail, boardwalks, bridges, restoration, signage, and restrooms.
2. Complete the Timber Cove Coastal Trail Feasibility Study which seeks to identify the California Coastal Trail in the northern half of this SubArea. Acquire easements if needed and construct trail or braided trails.

(E-2) Ocean Cove Coastal Access & Boat Launch

(2001 County LCP reference: #18, pages 75-76)

Access to Ocean Cove for pedestrians and for launching small watercraft is available for a small fee. Vehicular access to the blufftop and parking near the bluff are provided. A road from the bluff to a beach on the cove provides access.

Coastal Permit CPH00-0009 for a new single-family dwelling at 23150 (APN 109-050-012) and 23125 (APN 109-050-010) State Highway 1, Ocean Cove was approved on May 9, 2001. The Conditions of Approval included the requirement that prior to issuance of the building permit, the applicant shall offer access dedications (Offers to Dedicate or OTDs) to the Sonoma County Regional Parks Department (County Parks),

for vertical public access from State Highway 1 to the mean high tide at Ocean Cove Beach, and for horizontal public access easement along the bluff top; and the form and content of those offers are to be reviewed and approved by County Parks. The building permit for the new dwelling was issued on May 14, 2003, and final construction approval of the new dwelling was made on January 20, 2006. The two OTDs were made and recorded on October 16, 2009 almost six years since the building permit for the new dwelling was issued. However, County Parks has not consented to the content of the offers.

On March 14, 2009 the Sonoma County Board of Supervisors amended the Local Coastal Plan Land Use Map to conform to the approved General Plan Land Use Map Amendment and Zone Change for the Ocean Cove Resort to better reflect existing and potential uses and development on the affected properties. On March 8, 2012 the California Coastal Commission approved the Local Coastal Plan Amendment for Ocean Cove Resort (SON-MAJ-1-09).

Local Coastal Plan policy encourages modest expansion of existing or new visitor-serving commercial uses east of State Highway 1 near the Ocean Cove Store and adaptive reuse of the historic barn at the Ocean Cove Resort; and limits development west of State Highway 1 at the Ocean Cove Resort to controlled day use such as boat launching and picnicking. Policy also calls for any development proposal to include provisions for pedestrian safety on State Highway 1, erosion control measures, rehabilitating the degraded bluffs at Ocean Cove, and providing parking east of State Highway 1.

Owner/Manager:	Private
Existing Status:	Required and Proposed Dedication
Acquisition Priority:	I
Development Priority:	III
Existing Improvements:	Private campground, boat launch, store

Proposed Improvements and Programs:

1. Continue to provide maximum public access to the shoreline including the boat launch
2. Require the Offer to Dedicate a trail easement for pedestrians and bicyclists to connect Highway 1 with Stillwater Cove Regional Park through the campground.
3. Require the Offer to Dedicate for the boat launch to stipulate that in the event that the boat launch closes to the public, the County can exercise their easement and re-open the facility for public use.

(E-3) Bluff Trail: Ocean Cove to Stillwater Cove

(2001 County LCP reference: #19, page 76)

An existing bluff trail extends from Highway 1 at the Ocean Cove Campground south to Stillwater Cove Regional Park and crosses the private campground and four parcels owned by the State Parks. County Parks manages the four parcels as part of Stillwater Cove Regional Park under a management agreement with the State. The trail provides spectacular views and connects to two vertical access trails to the shoreline.

Owner/Manager:	Private, State/ Private, County
Existing Status:	Required and Proposed Dedication, May Be Prescriptive
Acquisition Priority:	I
Development Priority:	II
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Record the Trail Easement Offer to Dedicate required by Coastal Permit CPH00-0009. Include provisions for signage, relocating the easement due to bluff erosion, and year round hours of operation.
2. Add signage identifying the public trail, improve disabled access, and consider realigning across the trail on the State-owned parcels to reduce erosion. Connect trail to Stillwater Cove.
3. Consider designating part or the entire trail as the California Coastal Trail.
4. Use the existing restroom and parking facilities at Stillwater Cove Regional Park and Ocean Cove until use levels necessitates constructing additional facilities.

(E-4) Stillwater Cove Regional Park

(2001 County LCP reference #21, page 76 & page 96)

Stillwater Cove Regional Park offers a beautiful rocky shore, coastal terrace, and a sheltered beach well used for ocean based activities. Trails connect the lush Stockoff Creek canyon, scenic redwood groves, and the campground. There is a life estate covering 221 acres.

Owner/Manager:	County Parks
Existing Status:	Acquired, Partially Developed, Proposed
Acquisition Priority:	I

Development Priority: III

Existing Improvements: 3-miles of trail, picnic tables, restrooms, day use parking, 23 campsites, 1 walk-in/hike/bike campsites, fish cleaning station, cove suitable for boat access, ranger residence, park office

Proposed Improvements and Programs:

1. Master Plan the life estate to the east of the existing park.
2. Expand Stillwater Cove County Park to include the additional undeveloped land in the Stockoff Creek canyon. Extend the Stockoff Creek Trail to connect with Salt Point State Park.
3. Evaluate options for a long-term potable water supply.
4. Restore historic Fort Ross School when funding becomes available. Provide additional interpretation.
5. Replace three trail bridges over Stockoff Creek on the Creek Trail.
6. Evaluate options to renovate and enhance the day use parking area, damaged timber stairs to Highway 1, and picnic area to improve the user experience, provide additional amenities, signage, and picnic facilities.
7. Evaluate visitor opportunities for low-cost coastal accommodations options in accordance with the Coastal Conservancy program.
8. Identify the best continuous route for the California Coastal Trail through the park. Construct improvements.

(E-5) Stillwater Cove Regional Park – North Terrace & Coastal Access Trails

(2001 County LCP reference: #20, page 76)

These 4 parcels are across Stillwater Ranch, between Stillwater Cove and the Ocean Cove campground. Several turnouts with informal connecting trails provide access from the Highway to the bluff and the shoreline.

Owner/Manager: State Parks/County Parks

Existing Status: Dedicated, Undeveloped

Acquisition Priority: None

Development Priority: III

Existing Improvements: Informal trails, 5-7 turnout parking spaces

Proposed Improvements and Programs:

1. Develop safe trails connecting the Bluff Trail at Ocean Cove to Stillwater Cove (E-4) and the shoreline.
2. Consider constructing additional trails, including the Coastal Trail, to vistas on interior meadows and rock outcrops, and parking improvements. Use existing restroom and parking facilities at Stillwater Cove Regional Park until overcrowding necessitates constructing additional facilities.

(E-6) Stillwater Cove Regional Park – Stillwater Cove Coastal Access and Boat Launch

(2001 County LCP reference: #21, page 76 & page 97)

Stillwater Cove is a sheltered cove popular for diving, boating, fishing, tidepooling, and picnicking. The Stockoff Creek Trail on the east side of the Highway connects the cove with the campground and other trails.

Owner/Manager:	County Parks
Existing Status:	Acquired, Partially Developed
Acquisition Priority:	I
Development Priority:	III
Existing Improvements:	Paved vehicle loading area and trail, restrooms, rescue craft building, picnic tables, fish cleaning station.

Proposed Improvements and Programs:

1. Evaluate options for additional picnic facilities at the cove.
2. Develop a safe trail to connect the cove to the northern portions of the park.

(E-7) Stillwater Cove Regional Park Expansion – Pocket Cove

(2001 County LCP reference: #22, page 76)

A 10-acre parcel contains coastal terrace and rocky coastline adjacent to Stillwater Cove Regional Park. The Coastal Commission, County Regional Parks Department, and Sonoma Land Trust have identified this 10-acre parcel adjacent to the southern boundary of Stillwater Cove Regional Park known as “Pocket Cove” as a key potential addition to the park. In 1979 the Coastal Commission required the property developer to dedicate at least two acres adjacent to the existing park including Pocket Cove and provide Highway 1 frontage for a future trail connection to the south. The property was subsequently sold and has not been developed.

The Sonoma Land Trust identified the parcel as a “Tier One Opportunity” in its May 2002 *Russian River/North Coast Parcel Analysis*. As an expansion to Stillwater Cove Regional Park, it would provide access to the southern coastal terrace, spectacular views from the unnamed point, and shoreline access to Stillwater Cove. A recorded offer to dedicate is adjacent to the south side of the Pocket Cove parcel.

Owner/Manager:	Private
Existing Status:	Proposed Dedication, May Be Prescriptive
Acquisition Priority:	I
Development Priority:	III
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Pursue one of the following: a) require dedication of a public access easement with any development approval, b) purchase an access easement, or c) acquire the property.
2. Provide connecting trails between the existing Stillwater Cove Regional Park, the blufftop and shoreline. Consider designating a part as a link of the California Coastal Trail.
3. Use the existing restroom and parking facilities in Stillwater Cove County Park until use necessitates examining facility development.

(E-8) Timber Cove Access Easements

(2001 County LCP reference: none; numerous Coastal Permits)

Eight Offers to Dedicate have been accepted at locations within the Timber Cove Subdivision by County Parks. Although they are not contiguous, they may support the eventual connection and development of the California Coastal Trail as well as a potential connection to the beach.

Owner/Manager:	County (easement)
Existing Status:	Dedicated, Undeveloped
Acquisition Priority:	None
Development Priority:	III
Existing Improvements:	None

Proposed Improvements and Programs:

1. Complete the Timber Cove Coastal Trail Feasibility Study to identify the preferred alignment of the Coastal Trail through Timber Cove, using the Timber Cove access easements where feasible.

(E-9) Timber Cove Connection Trail

(2001 County LCP reference: #23, page 77)

This trail will connect an existing coastal access trail on the southern part of Ninive Drive to a coastal access trail at Timber Cove Inn. It will run from Cormorant Point along the southern end of Ninive Drive, to the west of Highway 1, to the blufftop adjacent to the Timber Cove Inn where it will connect with the Timber Cove Inn Coastal Access.

Owner/Manager: Private/To Be Determined

Existing Status: Required and Proposed Dedication, May Be Prescriptive

Acquisition Priority: II

Development Priority: II

Existing Improvements: Informal trails

Proposed Improvements and Programs:

1. Acquire access as a condition of approval for new development or through purchase of easement or fee title.
2. Develop a trail from the southern end of Ninive Drive to the Timber Cove Inn to connect the coastal access trails and provide bluff access. Consider designating portions or all the California Coastal Trail.

(E-10) Timber Cove Inn Coastal Access

(2001 County LCP reference: #24, page 77)

Several trails which may be prescriptive lead from the Timber Cove Inn property to the coastline. Local Coastal Plan policy limits expansion at the Timber Cove Inn to improved parking facilities and coastal access. Vertical and lateral access supporting a continuous California Coastal Trail shall be a condition of approval for renovating the Inn.

Owner/Manager: Private

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: II

Development Priority: II

Existing Improvements: Developed and informal trails

Proposed Improvements and Programs:

1. Acquire vertical access and link with Timber Cove Connection Trail (E-9).
2. Provide public parking and restrooms either combined with or separate from the Inn.

(E-11) Timber Cove Inn – Bufano Statue

(2001 County LCP reference: none)

The State Department of Parks and Recreation owns the parcel containing the Benny Bufano statue located in the surroundings of the Timber Cove Inn. The State also owns an undeveloped trail easement and a partially developed parking easement intended to access the statue. An informal trail for viewing the ocean and statue leads from the Timber Cove Inn parking lot across the bluff to the statue.

Owner/Manager: State

Existing Status: Dedicated

Acquisition Priority: None

Development Priority: II

Existing Improvements: Statue, informal trails and parking area

Proposed Improvements and Programs:

1. Develop a trail route from the parking area to the Bufano Statue that meets accessibility guidelines. If necessary, relocate the existing trail and parking easement to follow the existing or an improved trail alignment and parking area.
2. Connect the statue to the Timber Cove Bluff Connection Trail when the bluff trail is established.
3. Install signage on Highway 1 identifying “Coastal Access” to the Bufano Statue as a State Park facility.

(E-12) Timber Cove Boat Landing & Campground

(2001 County LCP reference: #20, page 76)

A private campground south of Timber Cove Inn provides boat launching, camping, and a road to the beach. Extensively used by divers, the boat launch is particularly important.

Owner/Manager: Private

Existing Status: Developed

Acquisition Priority: None
Development Priority: None
Existing Improvements: Access road to boat launch, campground office, campsites

Proposed Improvements and Programs:

1. Continue beach access and boat launching under private ownership. If the property owner closes the access, consider acquisition of the boat launch facility.

(E-13) Fort Ross Area – Offers to Dedicate

The State Coastal Conservancy accepted five Offers to Dedicate north of Fort Ross State Historical Park. Although they are not all contiguous, several are important as future links of the California Coastal Trail. The State Coastal Conservancy will eventually transfer the Offers to Dedicate to State Parks or County Parks.

Owner/Manager: Private, State/To Be Determined
Existing Status: Dedicated, Undeveloped
Acquisition Priority: None
Development Priority: III
Existing Improvements: None

Proposed Improvements and Programs:

1. Complete the Timber Cove Coastal Trail Feasibility Study to identify which of the five Offers to Dedicate can be useful to provide coastal access or to support the California Coastal Trail.

(E-14) Fort Ross State Historic Park Unit

(2001 County LCP reference: #26-31, pages 77-79 & page 105)

Fort Ross State Historic Park has over 4 miles of shoreline, 3,300 acres, multiple access points and a trail network that provides access to the coastal terrace and shoreline. The historic structures from the Russian settlement, trails, campsites, and almost all amenities are located west of the highway. Most of the property is to the east of Highway 1 and is undeveloped.

The Sonoma Land Trust identifies an expansion of Fort Ross State Historic Park as a “Tier Two Opportunity” in its May 2002 *Russian River/North Coast Parcel Analysis*.

Owner/Manager: State
Existing Status: Acquired, Developed

Acquisition Priority:	III
Development Priority:	II
Existing Improvements:	Visitor center, historic buildings, interpretive exhibits, 21 campsites, restrooms, picnic facilities, day use parking

Proposed Improvements and Programs:

1. Encourage continued restoration of the historic structures.
2. Realign and improve the California Coastal Trail to provide improved access and protection of natural and cultural resources. Trail improvements include boardwalks to protect wetlands, and bridges for crossing drainages.
3. Develop cultural interpretive trail focusing on Kashia Pomo culture, and integrate cultural trail with the California Coastal Trail.
4. Update the park General Plan to include the parkland on the east side of Highway 1. Consider additional trails and camping opportunities on the east side of the State Highway. Evaluate the need for additional camping, including group camping facilities and environmental campsites.
5. Acquire additional acreage in the Fort Ross Creek watershed to expand recreational opportunities and support resource protection.
6. Construct restrooms and improve parking areas at Fort Ross Terrace, Windermere Point, and Kolmer Gulch.

(E-15) Fort Ross State Historic Park Unit – Windermere Point

(2001 County LCP reference: #26, page 78)

The site is a former lumber mill. It is used for vehicular access, parking, and pedestrian access to the coastline. It is physically degraded and in need of restoration, but provides for a significant amount of recreational use.

Owner/Manager:	State
Existing Status:	Acquired, Undeveloped
Acquisition Priority:	None
Development Priority:	II
Existing Improvements:	Informal day use parking

Proposed Improvements and Programs:

1. Develop parking and restroom facilities to serve both Windermere Point and Kolmer Gulch.

2. Develop the California Coastal Trail to connect Kolmer Gulch and Windermere Point

(E-16) Fort Ross State Historic Park Unit – Kolmer Gulch

(2001 County LCP reference: #27, page 78)

The beach at Kolmer Gulch is relatively large, sandy, attractive, and popular. Access to the beach is from informal trails leading from turnouts on State Highway 1.

Owner/Manager:	State
Existing Status:	Acquired, Undeveloped
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	None

Proposed Improvements and Programs:

1. Develop parking and restroom facilities to serve both Windermere Point and Kolmer Gulch.
2. Develop a trail connecting Kolmer Gulch with Windermere Point to the north and the bluff tops to the south.

(E-17) Fort Ross State Historic Park Unit – Call Ranch

(2001 County LCP reference: #28, page 78)

The Call Ranch stretches from Fort Ross north almost to Kolmer Gulch and was acquired as an expansion of Fort Ross State Historic Park. The coastline is rocky and has a small beach area at low tide; and there is vertical access down a steep path at Sandy Cove.

Owner/Manager:	State
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	III
Existing Improvements:	Historical structures, interpretive exhibits, trails

Proposed Improvements and Programs:

1. Develop an accessible trail from the Call House to the Fort Ross Visitor Center
2. Improve existing trail access to North Cove and extend trail east to the Call House

(E-18) Fort Ross State Historic Park Unit – Reef Campground

(2001 County LCP reference: #29, page 79)

A road to the northern boundary and a parking area provide access to the cove to the south, the cove to the north, and a bluff trail to the beach at Fort Ross State Historic Park. The middle bluff road and parking area lead to two steep shoreline trails.

Owner/Manager:	State
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	None
Existing Improvements:	21 campsites, restrooms, day use parking

Proposed Improvements and Programs:

1. Extend the California Coastal Trail to the south to connect with the Fort Ross Terrace parking area.

(E-19) Fort Ross State Historic Park Unit – South Reef

(2001 County LCP reference: #30, page 79)

This coastal access trail provides access to the Fort Ross Reef area and is popular with abalone divers and fishermen.

Owner/Manager:	State Parks
Existing Status:	Acquired
Acquisition Priority:	None
Development Priority:	II
Existing Improvements:	Informal access trails, day use parking

Proposed Improvements and Programs:

1. Improve and expand existing parking area.
2. Develop Coastal Trail Trailhead signing at the parking area.
3. Develop bridge crossing to extend Coastal Trail to the south. Improve existing beach access trail to the south of unnamed drainage.

(E-20) Fort Ross State Historic Park Unit – Cardiacs Trail

(2001 County LCP reference: #31, page 79)

This access point is the most southerly access point at Fort Ross State Historic Park. A steep trail leads to a long narrow beach at the mouth of Timber Gulch.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: III
Existing Improvements: 0.3-mile trail, day use parking

Proposed Improvements and Programs:

1. Improve vehicular access to the trailhead.
2. Provide trail connections to the north.

THE HIGH CLIFFS/MUNIZ/JENNER SUBAREA 6 (FIGURE C-PA-1F)

(F-1) California Coastal Trail: Fort Ross State Historic Park to Bridgehaven

(2001 County LCP reference: page 100 & #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

This section of the Sonoma County coastline is extremely rugged and steep, making it a challenge for locating a trail. The California Coastal Trail is unidentified and undeveloped in this area, although informal trails connect short sections north and south of Russian Gulch. Long sandy and rocky beaches become exposed at low tides, but these areas can be dangerous.

The Coastal Trail route through the High Cliffs/Muniz/Jenner SubArea connects Fort Ross State Historic Park, Vista Trail, Russian Gulch, Jenner Headlands Preserve, Russian River Bridge, and Bridgehaven. The route should either directly connect with Jenner or have a connector trail.

Owner/Manager: Private / State Parks
Existing Status: Partially Acquired
Acquisition Priority: I
Development Priority: I

Existing Improvements: Existing trails and parking areas may be incorporated into alignment

Proposed Improvements and Programs:

1. Study off-road trail alignments between Fort Ross State Historic Park and Bridgehaven and select the most appropriate route or routes for the California Coastal Trail. The study will be based on the Coastal Commission's Guidelines for Siting the California Coastal Trail. The feasibility study should include a water taxi between Jenner River Access and Goat Rock River Access.
2. Modify the Russian River Bridge south of Jenner to provide safe pedestrian access for the Coastal Trail including a barrier or other separation between trail users and motorized vehicle traffic.
3. If needed, work with Caltrans and willing land owners to acquire land or easements for a safe off-road trail alignment. The California Coastal Trail should be separate from roads with motorized traffic.
4. Construct the trail in phases as funding becomes available.

(F-2) Sonoma Coast State Park Unit

(2001 County LCP reference: page 106)

The Sonoma Coast State Park spans almost the entire coastline through this subarea and contains numerous coastal access points, trails, and other facilities. Hiking, ocean and freshwater fishing, sea kayaking, seal and whale watching, tidepooling, surfing, and scuba diving are popular activities.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	See specific access points
Development Priority:	See specific access points
Existing Improvements:	Russian Gulch - day use beach access, restroom, and 30 parking spaces; Goat Rock - day use beach and river access, 2 restrooms, picnic sites, and 230 parking spaces (Blind Beach – 20, Arched View – 32; Goat Rock North – 68, Goat Rock South – 110); Campground – 12 campsites, river access, restroom, and 20 parking spaces; and State Highway 1 - numerous roadside turnouts

Proposed Improvements and Programs:

1. Continue deferred maintenance, rehabilitations, and upgrades as opportunities allow.
2. See recommendations for specific access points.

(F-3) Sonoma Coast State Park – Vista Trail

(2001 County LCP reference: #32, page 79)

The Vista Trail was acquired and developed by the State Parks as an accessible scenic interpretive facility. It is the northernmost developed part of the Sonoma Coast State Park. The view extends from Jenner to Point Reyes and captures most of the southern Sonoma Coast.

Owner/Manager:	State
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	None
Existing Improvements:	1-mile paved loop accessible trail, picnic tables, restroom, and 15 day use parking spaces

Proposed Improvements and Programs:

1. Include the Vista Trail in the alignment of the California Coastal Trail if determined feasible.

(F-4) Russian Gulch – Northern Access Trail

(2001 County LCP reference: #33, page 80)

An informal trail leads from Russian Gulch over the hill to the cove to the north. At low tides it is possible to connect with Fort Ross State Historical Park, but the beach route can be dangerous. A gap in State ownership on the western side of State Highway 1 remains between the southern edge of Fort Ross State Historical Park and the northern edge of Sonoma Coast State Park.

Owner/Manager:	State Parks
Existing Status:	Acquired, Undeveloped
Acquisition Priority:	I
Development Priority:	I
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Acquire remainder of the trail corridor to connect Russian Gulch and Vista Trail with Fort Ross State Historic Park. Study trail alignment alternatives for a safe, continuous trail as the California Coastal Trail. Evaluate both west and east sides of Highway 1.
2. Realign the existing informal trails to reduce erosion, protect resources, and provide safer and increased public access.

(F-5) Sonoma Coast State Park – Russian Gulch

(2001 County LCP reference: #34, page 80)

Russian Gulch has a large, accessible, attractive, and heavily used beach.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	III
Existing Improvements:	Picnic tables, restrooms, 60 day use parking spaces

Proposed Improvements and Programs:

1. Include Russian Gulch in the alignment of the California Coastal Trail if determined feasible.
2. Improve the parking area and restrooms.
3. Develop a trail connecting Russian Gulch with the Jenner Headlands Preserve.

(F-6) Sonoma Coast State Park – North Jenner Beach

(2001 County LCP reference: #35, page 80 and #35-36, page 105)

Several turn-outs along State Highway 1 provide access to an informal trail network. The trails lead to the top of the bluff and in some cases the shoreline. There are excellent vistas to the mouth of the Russian River and north.

Owner/Manager:	State Parks
Existing Status:	Acquired, Undeveloped
Acquisition Priority:	II
Development Priority:	II
Existing Improvements:	Informal trails and about 29 parking spaces in six turnouts on State Highway 1

Proposed Improvements and Programs:

1. Construct restrooms and one parking area between Jenner and Russian Gulch. Evaluate all locations, including east of State Highway 1 not on State property.
2. Prevent vehicle access to the bluffs while providing safe turnout parking to the north and south of Manni Gulch. Evaluate and implement appropriate trail connections between North Jenner Beach and the proposed parking lot on Jenner Headlands Preserve (see F-7 below).
3. Construct a trail that includes safe shoreline access to the double cove from the parking area to No Dog Beach.

(F-7) Jenner Headlands Preserve

(2001 County LCP reference: parking lot only: #36, page 80)

The headlands above the town of Jenner include coastal bluffs and Jenner Gulch, a stream with steelhead trout that is the sole domestic water source for the town. The Sonoma Land Trust acquired 5,630 acres of the Jenner Headlands in 2009 using funding from both private and public sources and has since transferred the property to The Wildlands Conservancy, a non-profit organization that acquires and operates a network of preserves that provide public education and public access. The acquisition grants require that public access be provided on some portions of the property.

The Wildlands Conservancy and their partners are working on an Integrated Resource Management Plan that includes public access. The access element will propose short and long-term public access improvements and programs for facilities. Proposed facilities include two parking lots totaling 30 spaces with two ADA parking spaces and two spaces for school buses. The parking lot will include bioswales and other storm water features and two restrooms. The parking lot and up to 12 miles of ranch roads used as trails are expected to open in summer 2018.

Owner/Manager: The Wildlands Conservancy (Private)

Existing Status: Acquired, Partially Developed

Acquisition Priority: None

Development Priority: I

Existing Improvements: 34 parking spaces, restroom, 12 miles of trail

Proposed Improvements and Programs:

1. Provide maximum public access that is compatible with the preserve's conservation goals. Study public access and recreation facilities including multiple use trails,

overnight facilities including camping and backpacking, and environmental education facilities.

2. Locate the California Coastal Trail on the western portion of the property with coastal views to connect Russian Gulch with the Jenner area.
3. Implement the permitted access plan for a trailhead, trail, restroom, and associated amenities at Manni Gulch on Highway 1.
4. Provide maximum public access to the Preserve at a variety of access points in order to maximize connections and to disperse use. Study trail connections between Sonoma Coast State Park, State Highway 1, Jenner, and areas to the east. Pursue if compatible with conservation goals.
5. Encourage expansion of the Preserve to the north, east, and south to provide greater resource protection and recreation opportunities.
6. Encourage the retention of agriculture for ecological health and reducing fire danger. Manage the forest to promote maximum ecological, old growth forest characteristics, and reduce fire danger. A Non-Industrial Timber Harvest Plan may be required.

(F-8) River's End

(2001 County LCP reference: page 101)

River's End is a small private restaurant and resort facility located on the north side of the mouth of the Russian River in Jenner. Day use of the beach is possible. Cabins, a restaurant, and bar are also located on the property.

Owner/Manager:	Private
Existing Status:	Existing, May Be Prescriptive
Acquisition Priority:	III
Development Priority:	III
Existing Improvements:	Trail to beach
Proposed Improvements and Programs:	

1. Continue day use access to the beach.

(F-9) Russian River Water Trail

(2001 County LCP reference page 100)

The Russian River Water Trail is a water-based route for non-motorized recreational boating that are anchored by land based launch sites, camping, and picnicking facilities.

Water trails provide educational and scenic experiences and are designed to accommodate boaters of all ages and abilities. With an integrated system of facilities, 'trail' guides and access site informational signage, good water trail programs encourage minimum-impact use and emphasize stewardship of the aquatic ecosystems, and historical features.

Owner/Manager: State, County/To Be Determined

Existing Status: Existing, Partially Developed

Acquisition Priority: I

Development Priority: I

Existing Improvements: Various

Proposed Improvements and Programs:

1. Study the Russian River Water Trail to identify an integrated system of facilities and programs to promote increased safe and responsible public access to the Russian River.
2. See specific river access facility proposed improvements in this plan.

(F-10) Jenner River Access

(2001 County LCP reference: #36, pages 80 & 105)

Located at the mouth of the Russian River, this facility includes a popular small boat launch ramp and a small visitor center. The building was damaged by floods and was closed in the mid-1990s, but is now open to the public on a seasonal basis and is being renovated.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: Visitor center building, restroom, boat ramp, and 8 day use parking spaces

Proposed Improvements and Programs:

1. Provide structural improvements to the visitor center, including raising the building above flood levels.
2. Continue to partner with the Sonoma County Water Agency in management of the Russian River estuary.

3. Continue to operate the boat ramp, restroom, and visitor center as a coastal public information center.
4. Provide deferred maintenance to ensure viability of the visitor center.
5. Study the feasibility of acquiring adjacent properties to provide additional parking spaces for the visitor center and river access.

(F-11) South Jenner Vista Points

(2001 County LCP reference: #37, page 80)

Several turnouts are located within the right-of-way along State Highway 1 between Jenner and the Russian River Highway 1 Bridge that provide visual access to the Russian River, Penny Island, and Jenner Pond. Jenner Pond is a freshwater wetland located near the intersection of State Highway 116 and State Highway 1. The Sonoma Land Trust identified the pond as a “Tier Two Opportunity” in its May 2002 *Russian River/North Coast Parcel Analysis*.

Owner/Manager:	Caltrans, Private/Undetermined
Existing Status:	Partially Dedicated, Undeveloped
Acquisition Priority:	III
Development Priority:	III
Existing Improvements:	Informal turnouts

Proposed Improvements and Programs:

1. Designate a minimum of two turnouts as highway vista points, one for northbound traffic and one for southbound traffic. Provide directional road signs to notify the public about the vista points. Develop interpretive signs. Expand existing turnouts as necessary to provide safe access.
2. Encourage conservation agencies to acquire fee title or a conservation easement protecting Jenner Pond.

(F-12) Russian River Access from Highway 1 Bridge to Sawmill Gulch

(2001 County LCP reference: #38, page 80)

Several turnouts along State Highway 116 provide parking for informal trails across public and private property to the Russian River. The most desirable destination is the cove at the mouth of Sawmill Gulch, but no developed parking is available. State Parks owns an undeveloped ten-acre riverside parcel provides access to the River. Additional access points would offer canoers and kayakers access to the lower five miles of the

river. The Sonoma Land Trust identifies this area as a “Tier Two Opportunity” in its May 2002 *Russian River/North Coast Parcel Analysis*.

Owner/Manager:	State – Caltrans, Private
Existing Status:	Existing, Proposed, May Be Prescriptive, Undeveloped
Acquisition Priority:	III
Development Priority:	III
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Continue all existing informal access.
2. Pursue acquisition of easements or fee title for river access between Jenner and Duncans Mills. Assess the need for related facilities at the time of dedication.
3. Develop a trail and parking area for the property owned by State Parks.
4. Duncans Mills SubArea 7 (Figure C-PA-1g)

(G-1) Russian River Water Trail

(2001 County LCP reference: page 100)

The Russian River Water Trail is a water-based route for non-motorized recreational boating that is anchored by land based launch sites, camping, and picnicking facilities. Water trails provide educational and scenic experiences and are designed to accommodate boaters of all ages and abilities. With an integrated system of facilities, access site informational signage, good water trail programs encourage minimum-impact use and emphasize stewardship of the aquatic ecosystems, and historical features.

Owner/Manager:	Various
Existing Status:	Partially dedicated and developed
Acquisition Priority:	II
Development Priority:	II
Existing Improvements:	See individual proposed improvements

Proposed Improvements and Programs:

1. Study the Russian River Water Trail to identify an integrated system of facilities and programs to promote increased safe and responsible public access to the Russian River.
2. See specific river access facility proposed improvements in this plan.

(G-2) Riccioli Ranch

(2001 County LCP reference: #39, page 81)

A long, wide beach borders the Riccioli Ranch property on the Russian River but public access is not available.

Owner/Manager:	Private
Existing Status:	Proposed
Acquisition Priority:	II
Development Priority:	II
Existing Improvements:	Unknown

Proposed Improvements and Programs:

1. Pursue acquisition of fee title or easement for public access with willing landowner. Manage agriculture and public access to ensure mutual compatibility. Assess the need for related facilities at the time of dedication.

(G-3) Duncans Mills Campground

(2001 County LCP reference: #40, page 81; page 102; #62-63, page 107)

Duncans Mills Campground is a resort on the north bank of the Russian River, with a sandy beach and dense riparian vegetation open to camp club members and the public on occasion. Fishing, boating, hiking, picnicking, and horseback riding (including rentals), are common activities. Access to the Russian River was allowed for a small day use fee, but is now available only for private use by camp club members.

Owner/Manager:	Private
Existing Status:	Proposed
Acquisition Priority:	III
Development Priority:	III
Existing Improvements:	125 campsites, restrooms with showers, recreational vehicle sanitation facilities, boat launch, playground, basketball, volleyball, recreation center

Proposed Improvements and Programs:

1. Pursue acquisition of a public access easement or fee title if there is a willing seller.
2. Require dedication of a public access easement or other type of public access as a condition of approval for expanding the campground.

(G-4) Casini Family Ranch Campground

(2001 County LCP reference: #41, page 107)

Access to the Russian River is allowed for a small day use fee when the campground is not full.

Owner/Manager:	Private
Existing Status:	Existing, Proposed
Acquisition Priority:	III
Development Priority:	III
Existing Improvements:	225 campsites, restrooms, cabins, recreational vehicle waste disposal facilities, boat launch, playground, recreation center, sports fields

Proposed Improvements and Programs:

1. Continue public day use, including day use parking.
2. If the property owner discontinues public access, pursue acquisition of a public access easement.
3. Require as a condition of approval for expansion of the campground that a portion be available for day use.
4. Encourage development of additional campsites and camper services. Any development plans should include prohibiting camping between the river and the riparian vegetation on the beach.

(G-5) Steelhead Boulevard River Access

(2001 County LCP reference: None)

Steelhead Boulevard right-of-way extends to the Russian River's mean high water in at least one location.

Owner/Manager:	County – Public Works/Undetermined
Existing Status:	Proposed
Acquisition Priority:	III
Development Priority:	III
Existing Improvements:	Informal trail

Proposed Improvements and Programs:

1. Determine extent of public lands. Develop access on public right-of-way. Pursue acquisition of additional property from willing sellers if needed to support access.

(G-6) Rancho del Paradiso Subdivision/Freezeout Road River Access

(2001 County LCP reference: #42, page 82)

A beach is located adjacent to the Rancho del Paradiso Subdivision along the Russian River and connects to Freezeout Road via several roads, trails, and rights of way. Some of these routes have never been cleared, and others have been closed by physical barriers and overgrown vegetation. The Sonoma Land Trust and the County own several parcels and rights-of-way in the subdivision that may be able to provide public access from Freezeout Road.

Owner/Manager:	Private
Existing Status:	Proposed, May Be Prescriptive
Acquisition Priority:	III
Development Priority:	III
Existing Improvements:	Unknown

Proposed Improvements and Programs:

1. Study the feasibility of providing maximum public access to the river using the existing County rights of way and Sonoma Land Trust parcels. Assess the need for support facilities, including parking management.
2. Clear Beach Drive and open it to pedestrian access. Consider constructing a parking area for eight cars within the 70-foot roadway.

(G-7) Sonoma Coast State Park – Willow Creek – Freezeout Access

Located to the southwest of Duncans Mills, the Freezeout Access trailhead provides access to the eastern area of the Willow Creek Area of Sonoma Coast State Park. Access is currently limited to permit holders and their guests.

Owner/Manager:	State Parks
Existing Status:	Existing
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	Freezeout Creek watershed - about 8.8 miles of multi-use trails; Freezeout Access trailhead – 20 undeveloped day use parking spaces and equestrian trailer access.

Proposed Improvements and Programs:

1. Improve the trailhead facility and access road to reduce erosion and provide parking definition.
2. Include the Freezeout Creek watershed in the Willow Creek roads and trails plan as recommended under (H-9) Sonoma Coast State Park - Willow Creek Area.
3. Include Freezeout Creek area in the watershed and stream restoration projects as recommended under (H-9) Sonoma Coast State Park - Willow Creek Area.

(G-8) Duncans Mills River Access

(2001 County LCP reference: None)

Moscow Road crosses the Russian River adjacent to Duncans Mills, but no public access is currently available.

Owner/Manager:	Unknown
Existing Status:	Proposed, May Be Prescriptive
Acquisition Priority:	III
Development Priority:	III
Existing Improvements:	Unknown

Proposed Improvements and Programs:

1. Study the feasibility of providing maximum public access at or near the Moscow Road Bridge at Duncans Mills within the existing public right-of-way. If feasible, develop appropriate public access.

(G-9) Monte Rio – Willow Creek Trail

(2001 County LCP reference: page 99; 2010 Bikeways Plan Project #209)

The Monte Rio - Willow Creek Trail is a proposed Class I Bikeway to provide access between Monte Rio, the Russian River, and the Coast. This facility may pass through the Duncans Mills SubArea. County Parks and partners have received state funding and local funding to complete a feasibility study of a Class 1 Bikeway from Forestville to Highway 1 which includes this section in the Coastal Zone.

Owner/Manager:	To Be Determined
Existing Status:	Proposed
Acquisition Priority:	III
Development Priority:	III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the trail to identify the best alignment. Address flooding issues through trail alignment, design, and management.
2. Acquire property for the trail from willing sellers if needed.
3. Construct the trail.

PACIFIC VIEW/WILLOW CREEK SUBAREA 8 (FIGURE C-PA-1H)

(H-1) Russian River Water Trail

(2001 County LCP reference: page 100)

The Russian River Water Trail is a water-based route for non-motorized recreational boating that are anchored by land based launch sites, camping, and picnicking facilities. Water trails provide educational and scenic experiences and are designed to accommodate boaters of all ages and abilities. With an integrated system of facilities, 'trail' guides and access site informational signage, good water trail programs encourage minimum-impact use and emphasize stewardship of the aquatic ecosystems, and historical features.

Owner/Manager: State, County/To Be Determined

Existing Status: Existing, Partially Developed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Various

Proposed Improvements and Programs:

1. Study the Russian River Water Trail to identify an integrated system of facilities and programs to promote increased safe and responsible public access to the Russian River.
2. See specific river access facility proposed improvements in this plan until a Russian River Water Trail Plan has been completed.

(H-2) Sonoma Coast State Park Unit

(2001 County LCP reference: page 106)

The Pacific View Area consists primarily of coastal terrace lands west of State Highway 1. There are 10 day use access points providing trail access to the beach. The Kortum Trail provides lateral trail access along the coastal terrace.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: II

Existing Improvements: Day use parking lots, roadside turnouts, restrooms, and beach access trails; Wrights Beach Campground – 23 campsites, restroom, and day use beach access

Proposed Improvements and Programs:

1. Implement projects identified in the Sonoma Coast State Park General Plan, including development of a reliable water source for public facilities at Wrights Beach.

(H-3) Sonoma Coast State Park – Penny Island

(2001 County LCP reference: page 105)

Penny Island is accessible only by water craft. The island contains remnants of dairy ranch buildings and is popular with day use explorers.

Owner/Manager: State Parks

Existing Status: Acquired, Undeveloped

Acquisition Priority: None

Development Priority: I

Existing Improvements: Historic structures

Proposed Improvements and Programs:

1. Designate Penny Island and the marsh at Goat Rock as a State Reserve or State Natural Reserve.
2. Stabilize and preserve the existing milking barn and install interpretive signing.

(H-4) Sonoma Coast State Park – Russian River Access

(2001 County LCP reference: #43, page 82)

The beach at the mouth of the Russian River is accessible from the Goat Rock parking area at Sonoma Coast State Park.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 68 day use parking spaces

Proposed Improvements and Programs: None

(H-5) Sonoma Coast State Park – Goat Rock Ocean Access

(2001 County LCP reference: #46, page 82)

Four coastal access trails are available from Goat Rock Road within the Goat Rock Beach Unit.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	None
Existing Improvements:	4 trails, restrooms, 110 parking spaces
Proposed Improvements and Programs:	None

(H-6) Sonoma Coast State Park – Blind Beach

(2001 County LCP reference: #46, page 82)

A steep trail provides access to the ocean within the Goat Rock Beach Unit. The parking area is also the northern trailhead for the Kortum Trail.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	None
Existing Improvements:	0.25-mile trail, restrooms, 20 day use parking spaces
Proposed Improvements and Programs:	None

(H-7) California Coastal Trail: Bridgehaven to Carmet

(2001 County LCP reference: #47, page 83; page 100; #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The California Coastal Trail is partially developed through this subarea and includes the spectacular Kortum Trail from Blind Beach parking area to Wright's Beach. Recent upgrades to the Kortum Trail include boardwalks, bridges, gravel and asphalt surfacing to provide an accessible trail and to avoid damage to wetlands and coastal prairie. A new trailhead for the Kortum Trail was constructed at Wright's Beach.

Owner/Manager:	State Parks
Existing Status:	Partially Acquired, Partially Developed

Acquisition Priority: I

Development Priority: I

Existing Improvements: Kortum Trail, 3.8-mile trail, including 0.5 mile paved accessible trail, parking areas

Proposed Improvements and Programs:

1. Modify the Russian River Bridge south of Jenner to provide safe pedestrian access for the Coastal Trail including a barrier or other separation between trail users and motorized vehicle traffic.
2. Study potential safe, off-road alignments for the Coastal Trail between Bridgehaven and the Kortum Trail including routes to the east and west of State Highway 1. If needed, acquire easements from willing sellers. Construct the trail.
3. Designate a portion of the Kortum Trail as the California Coastal Trail. Designate a route through the campground, across Wright's Beach, and up the Duncan's Landing Access Trail as the California Coastal Trail.
4. Study potential safe, off-road alignments for the Coastal Trail between Duncan's Landing and Carmet including routes to the east and west of State Highway 1. If needed, acquire easements or fee title from willing sellers and collaborate with Caltrans Highway 1 Gleason Beach realignment project. Develop the trail.

(H-8) Bridgehaven Trailer Park – Boat Launch

(2001 County LCP reference: #44, page 82)

Fee boat launching was available at the trailer park but is now available only to occupants. For additional information and recommendations, see Visitor Serving and Commercial Facilities section.

Owner/Manager: Private

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: III

Development Priority: III

Existing Improvements: Boat launch

Proposed Improvements and Programs:

1. Construct a new public access to the river beneath the bridge on Caltrans right-of-way if feasible.
2. Pursue acquisition of an access easement to the river. Assess the need for related facilities at the time of dedication.

(H-9) Sonoma Coast State Park – Willow Creek Area

(2001 County LCP reference: page 106)

The inland Willow Creek Area consists of the lower and a majority of the upper watershed of Willow Creek and portions of the watershed of Freezeout Creek. The total area is about 4800 acres. Only the lower area of these watersheds support developed facilities. Access to the area is provided in four locations - upper and lower Willow Creek Road, Freezeout Creek Access, and Coleman Valley Road Access.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	Pomo Campground - 22 walk-in campsites; Willow Creek Environmental Campground – 12 campsites with river access; trailhead – 30 parking spaces and pit toilets; primitive roads serving as trail access; Willow Creek watershed – about 14 miles of trail; and administrative facility for maintenance

Proposed Improvements and Programs:

1. Restore and expand the Willow Creek ranch buildings as a hostel, administrative facility, and/or environmental education facility. Development should reflect the historic character of the existing structures.
2. Continue negotiations with the owner of the property in the eastern portion of the Willow Creek watershed to acquire fee title and/or conservation easements for improved access and recreation opportunities.
3. Develop a roads and trail plan for Willow Creek to identify trailhead access points, and provide a recreational trails network linking Willow Creek to lands east, west, and south. Based on an approved roads and trails plan, identify and construct trail improvement projects.
4. Conduct watershed and stream restoration projects that include realigning, renovating, or removing problematic roads or other facilities identified as a significant source of sediment.

(H-10) Willow Creek Road Russian River Access

(2001 County LCP reference: none)

Access to the Russian River is available from an informal launch site on the side of Willow Creek Road, near the borrow pit, approximately ¼ mile before the Willow Creek Environmental Campground access trail.

Owner/Manager:	County Public Works/State Parks
Existing Status:	Acquired, Undeveloped
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	Informal boat launch, roadside parking
Proposed Improvements and Programs:	

1. Provide improved parking, signage, and boat launching at this location.

(H-11) Willow Creek Environmental Campground - Russian River Access

(2001 County LCP reference: #45, page 82)

Access to the Russian River is available from an access road that leads from Willow Creek Road to the walkway in the Willow Creek Environmental Campground.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	II
Existing Improvements:	Hike or paddle-in environmental campground – 20 campsites with river access, 20 day use and overnight parking spaces

Proposed Improvements and Programs:

1. Explore the feasibility of additional environmental campsites in the meadow.

(H-12) Monte Rio – Willow Creek Trail

(2010 Bikeways Plan Project #209)

The Monte Rio - Willow Creek Trail is a proposed Class I Bikeway to provide access between Monte Rio, the Russian River, and the Coast. County Parks and partners have

received state funding and local funding to complete a feasibility study of a Class 1 Bikeway from Forestville to Highway 1 which includes this section in the Coastal Zone.

Owner/Manager: To Be Determined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the trail to identify the best alignment. Address flooding issues through trail alignment, design, and management.
2. Acquire property for the trail from willing sellers if needed.
3. Construct the trail.

(H-13) Sonoma Coast State Park – Dr. Joseph Memorial Trail

(2001 County LCP reference: none)

The Dr. Joseph Memorial Trail, also known as the Pomo Canyon Trail, connects the Pomo Campground to the Shell Beach parking area on State Highway 1. An additional 1.25-mile loop trail has been developed on the Red Hill property to the south.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: I

Existing Improvements: 3.5-mile trail

Proposed Improvements and Programs:

1. Provide trail connections between the Dr. Joseph Memorial Trail and Red Hill Trail to Wright Hill Ranch Preserve.

(H-14) Wright Hill Ranch Preserve

This 1,235-acre property was acquired from the Poff Family by the Sonoma County Agricultural Preservation & Open Space District in 2005 to provide resource protection and compatible recreation. It is bordered by Sonoma Coast State Park to the north and west. In 2017 the District adopted the Wright Hill Ranch Preserve Management Plan –

Natural and Cultural Resources, which guides management decisions. The Management Plan does not include public access use or development.

Owner/Manager: County Agricultural Preservation & Open Space District

Existing Status: Acquired, Undeveloped

Acquisition Priority: None

Development Priority: I

Existing Improvements: Ranch roads, historic structures

Proposed Improvements and Programs:

1. Transfer the property to County Parks or State Parks to complete a management plan inclusive of public access in order to expand recreational opportunities, integrate public access with natural resource management goals, and provide for natural and historic interpretation.
2. Consider retaining agriculture for grassland management objectives.
3. Evaluate preservation and public access options for the historic cabin complex.
4. Reuse existing roads and/or construct trails within the property and to connect the property with Red Hill, Wrights Beach area, and other areas if feasible.

(H-15) Sonoma Coast State Park – Shell Beach

(2001 County LCP reference: #48, page 83)

Shell Beach provides safe access to the shore. The Kortum Trail connects Shell Beach to the Blind Beach trailhead on the north and to the Wright's Beach area on the south. The parking area also serves as the trailhead for the Dr. Joseph Memorial Trail that connects to the Pomo Campground in Willow Creek.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 7 miles of trail, restrooms, 40 vehicle parking spaces

Proposed Improvements and Programs:

1. Continue improvements on the connecting trails to protect wetlands, reduce erosion, and protect other sensitive areas.

(H-16) Sonoma Coast State Park – Furlong Gulch

(2001 County LCP reference: #49, page 83)

This property was proposed for subdivision in the late 1970s, but was acquired by the State Parks and added to the State Park. A paved road, Grille Way, was developed prior to the acquisition and now provides access to the Kortum Trail at the northern and southern ends of the site.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: III
Existing Improvements: day use parking

Proposed Improvements and Programs:

1. Construct restrooms.

(H-17) Sonoma Coast State Park – Carlevaro Way

(2001 County LCP reference: None)

This property was proposed for subdivision in the late 1970s, but was acquired by the State Department of Parks and Recreation and added to the State Park. A paved road, Carlevaro Way, was developed prior to the acquisition and now provides access to the Kortum Trail at the northern and southern ends of the site.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: Day use parking

Proposed Improvements and Programs: None

(H-18) Sonoma Coast State Park – Wright's Beach

(2001 County LCP reference: #50, pages 83-84)

Wright's Beach contains the only public campground on the coast between the Russian River and the Bodega Dunes and as such is a major use area. An accessible trail with

parking has been developed adjacent to Wright's Beach on the southern end of the Kortum Trail.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: I
Existing Improvements: Trail, restroom, day use parking

Proposed Improvements and Programs:

1. Designate a route for the California Coastal Trail through Wright's Beach Campground to connect the Kortum Trail with the beach. Separate pedestrians from motorized vehicles to the extent feasible. Provide signage.

(H-19) Sonoma Coast State Park – Duncan's Landing

(2001 County LCP reference: #51, page 84)

Duncan's Landing is a peninsula with a loop road that provides views to Death Rock, and to the north and south. A trail provides access to Wright's Beach to the north.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: Trail, restroom, 45 day use parking spaces

Proposed Improvements and Programs: None

(H-20) Sonoma Coast State Park – Duncan's Cove

(2001 County LCP reference: #52, page 84)

Duncan's Cove is on the south side of Duncan's Landing. There are two trails to the cove, the primary trail begins at the Duncan's Cove parking lot and the secondary trail begins at the Duncan's Landing parking lot.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None

Existing Improvements: 2 trails, 25 day use parking spaces

Proposed Improvements and Programs: None

(H-21) Sonoma Coast State Park – Rock Point

(2001 County LCP reference: page 161)

This blufftop parking area adjacent to State Highway 1 has two turnouts that provide visual access to the shoreline.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Picnic table, 15 day use parking spaces

Proposed Improvements and Programs: None

(H-22) Sonoma Coast State Park – Gleason Beach Vista

(2001 County LCP reference: #53, page 84)

This bluff top vista provides visual access to the shoreline and parking.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 10 day use parking spaces

Proposed Improvements and Programs:

1. Maintain access and parking at the Gleason Beach vista point. Provide for no net loss of existing facilities during the realignment of State Highway 1 through this area.

(H-23) Sonoma Coast State Park – Scotty’s Creek – Gleason Beach Access

(2001 County LCP reference: #54, page 84)

This access point to Gleason Beach is where the sandy beach reaches State Highway 1 at Scotty’s Creek. Caltrans is pursuing relocating Highway 1 due to bluff failure. An agreement between Caltrans, Coastal Commission, and the County is being negotiated.

Owner/Manager: State, Private
Existing Status: Acquired, Developed
Acquisition Priority: I
Development Priority: I
Existing Improvements: Informal roadside parking for 20 vehicles

Proposed Improvements and Programs:

1. Require Caltrans to provide: access to Gleason Beach, off-road continuous Coastal Trail access to the north and south of the project limits, parking, and sufficient provisions for future modifications that may be needed due to sea level rise and additional bluff retreat.
2. Provide universal access to the beach to the degree feasible.
3. Evaluate additional potential adjacent acquisitions to either mitigate the impacts of the highway relocation or to enhance the public access at Scotty Creek Gleason Beach Access. Acquisitions could support additional parking, a restroom, vistas, removal of debris and other benefits.

(H-24) Sonoma Coast State Park – Scotty’s Creek Vista Point

This is an existing bluff-top turnout between Scotty’s Creek and Calle de Sol subdivision that provides visual access north to Scotty’s Creek and Gleason Beach and south towards North Portuguese Beach.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: I
Development Priority: I
Existing Improvements: 8 day use parking spaces

Proposed Improvements and Programs:

1. Install signage identifying the boundary between the existing State Park lands and the adjacent residence.

2. Evaluate acquisition opportunities to expand or enhance public access at the Gleason Beach area and to restore the bluff to its natural condition.

(H-25) Sonoma Coast State Park – North Portuguese Beach

(2001 County LCP reference: #55, page 85)

This access point consists of two coastal access trails and parking areas.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	None
Existing Improvements:	Two trails, 12 day use parking spaces in two areas
Proposed Improvements and Programs:	None

(H-26) Sonoma Coast State Park – Portuguese Beach

(2001 County LCP reference: #55, page 85)

This is a major access point to a large sandy beach.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	None
Existing Improvements:	Trail, 68 day use parking spaces
Proposed Improvements and Programs:	None

BODEGA BAY SUBAREA 9 (FIGURES C-PA-1I AND C-PA-1J)

(I-1) Sonoma Coast State Park Unit

(2001 County LCP reference: page 106)

The Sonoma Coast State Park spans most of the coastline of this SubArea, including Bodega Dunes Campground and day use areas and Bodega Head. Additional recreation facilities provided by the County include Doran Park and Spud Point Marina.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	II
Development Priority:	I
Existing Improvements:	98 campsites; about 9 miles of trail, including an all access loop trail around Bodega Head; coastal access; 40 day use parking spaces; restrooms

Proposed Improvements and Programs:

1. Encourage development of a multi-agency visitor center in the vicinity of Salmon Creek, Bodega Bay, or the Bodega Dunes Campground.
2. Encourage development of a nature trail west of State Highway 1 at the Salmon Creek Marsh.
3. Develop the California Coastal Trail from Keefe Avenue to Bay Flat Road.
4. Encourage partnerships with the U.C. Davis Bodega Bay Marine Lab and local conservation organizations in the restoration and management of natural dunes systems.
5. Develop concession agreements for the operation of equestrian trail rides.
6. Develop a planning and feasibility analysis for acquisition needs and route planning for completion of missing segments of the California Coastal Trail.

(I-2) California Coastal Trail – Carmet to Salmon Creek

(2001 County LCP reference: page 100 & #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The California Coastal Trail is unidentified from Carmet to Marshall Gulch, with steep cliffs preventing continuous access, and residential development complicating bluff access. From Marshall Gulch, the Coastal Trail route heads east of State Highway 1 onto the Carrington Ranch Preserve, currently owned by the Sonoma County Agricultural

Preservation & Open Space District. The proposed Coastal Trail crosses Salmon Creek at the highway bridge.

Owner/Manager: State, To Be Determined
Existing Status: Partially Acquired, Undeveloped
Acquisition Priority: I
Development Priority: I
Existing Improvements: None

Proposed Improvements and Programs:

1. Study the feasibility of connecting Carmet with Marshall Gulch. Routes west and east of Highway 1 should be evaluated. Acquire property from willing sellers if needed.
2. Develop the Coastal Trail from Marshall Gulch to the Salmon Creek State Highway 1 bridge as illustrated in the Carrington Ranch Immediate Public Use Facilities Plan completed by State Parks or successor plan.
3. Develop a trail separated from motorized vehicles across the Salmon Creek State Highway 1 Bridge.

(I-3) Sonoma Coast State Park – Schoolhouse Beach

(2001 County LCP reference: # 56, page 85 and #11, page 161)

This is a major access point to a large sandy beach towards the north end of Carmet.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: Trail, 79 day use parking spaces

Proposed Improvements and Programs: None

(I-4) Sonoma Coast State Park – North and South Carmet Beach

(2001 County LCP reference: #10, page 160)

This access point consists of one large parking turnout that serves two trails to two sandy beaches at the south end of Carmet.

Owner/Manager: State Parks

Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: 2 trails, 57 day use parking spaces
Proposed Improvements and Programs: None

(I-5) Sonoma Coast State Park – Marshall Gulch

(2001 County LCP reference: #9, page 160)

This access point consists of a short trail to a beach.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: Trail, 8 day use parking spaces
Proposed Improvements and Programs: None

(I-6) Carrington Ranch

(2001 County LCP reference: None)

The Carrington Ranch was acquired by the Sonoma County Agricultural Preservation and Open Space District for transfer to State Parks as an addition to Sonoma Coast State Park. The 330-acre property contains a historic ranch house and out buildings and is located entirely east of Highway 1. Coleman Valley Road bisects the property and provides access to the north and south. State Parks incorporated the Carrington Ranch into the Sonoma Coast State Park General Plan and subsequently prepared a focused plan to provide public use and guidance for stabilization of historic structures. However, State Parks is unable to accept the property, and County Parks will accept the property and will update and implement the Carrington Ranch Immediate Public Use Plan.

Owner/Manager: County Open Space District/County Parks
Existing Status: Acquired and Unimproved
Acquisition Priority: None
Development Priority: I
Existing Improvements: Historic Building, informal parking areas

Proposed Improvements and Programs:

1. Update and implement the Carrington Property Immediate Public Use Plan, including stabilizing historic structures, two parking areas with a total of 30 spaces, access improvements, restrooms, 3 miles of trail, picnic sites, and caretaker residence improvements.
2. Develop the California Coastal Trail from Marshall Gulch to Salmon Creek Bridge, as generally illustrated in the Carrington Ranch Immediate Public Use Plan.
3. Develop trail connections to properties to the east via trail easements and as conservation easements permit.
4. Complete and implement a Master Plan when resources allow.

(I-7) Sonoma Coast State Park – Arched Rock Vista

(2001 County LCP reference: #56, page 85)

This turnout on State Highway 1 immediately to the north of Coleman Valley Road provides spectacular views of Arched Rock and other sea stacks. There is currently no access to Arched Rock Beach from the Arched Rock Vista parking area.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: Trail, 34 day use parking spaces
Proposed Improvements and Programs: None

(I-8) Sonoma Coast State Park – Coleman Beach

(2001 County LCP reference: #56, page 85)

This turnout on Highway 1 immediately south of Coleman Valley Road provides spectacular views of Arched Rock and other sea stacks. The access to Coleman Beach washed out preventing access from the parking area.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: II
Existing Improvements: Trail, 26 day use parking spaces

Proposed Improvements and Programs:

1. Restore access to Coleman Beach if determined to be feasible.

(I-9) Sonoma Coast State Park – Miwok Beach

(2001 County LCP reference: #56, page 85)

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: Trail, 5 day use parking spaces
Proposed Improvements and Programs: None

(I-10) Sonoma Coast State Park – No-Name Beach

(2001 County LCP reference: #56, page 85)

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: Trail, day use parking
Proposed Improvements and Programs: None

(I-11) Sonoma Coast State Park – Rabbit Ears Beach

(2001 County LCP reference: #56, page 85)

Two sea stacks appear as rabbit ears when viewed from this parking area.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: Trail, 5 day use parking spaces
Proposed Improvements and Programs: None

(I-12) Sonoma Coast State Park – North Salmon Creek Beach

(2001 County LCP reference: #56, page 85)

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	None
Existing Improvements:	Trail, 40 day use parking spaces
Proposed Improvements and Programs:	None

(I-13) Sonoma Coast State Park – Bodega Bay to Sebastopol Trail

(2003 Draft County ORP: Trail AA)

This proposed trail begins at Bodega Bay by Salmon Creek and ends at the West County Trail, north of Sebastopol. The trail connects Bodega Bay, Salmon Creek Beach, Carrington Ranch and other trail easements and the West County Trail north of Sebastopol. The existing West County Trail continues south into Sebastopol. The western portion of this proposed trail is in the Coastal Zone.

Owner/Manager:	State, County, Private/ Undetermined
Existing Status:	Partially Acquired and undeveloped
Acquisition Priority:	II
Development Priority:	III
Existing Improvements:	None
Proposed Improvements and Programs:	

1. Study the feasibility of trail alignments between existing trail easements, and public road right of way, and Sebastopol.
2. If feasible, develop offer-to-dedicate trail easements after public parking at Carrington Ranch has been established.

(I-14) Salmon Creek Trail

(2003 Draft County ORP: Trail BG)

This proposed trail begins at the Pacific Ocean and ends at Occidental. The portion of the alignment in the Coastal Zone is unidentified. The portion of the Salmon Creek Trail from Bodega to Occidental is proposed as a Class I Bikeway, Project 207 in the Sonoma County Bikeways Plan.

Owner/Manager: To Be Determined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the feasibility to identify the most appropriate alignment. If needed, acquire easements or fee title from willing sellers. Develop trail.

(I-15) California Coastal Trail: Salmon Creek to Bodega Harbor Subdivision

(2001 County LCP reference: page 100 & #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The California Coastal Trail is a braided trail through this area and consists of two routes serving two purposes. The coastal route follows the western side of the Bodega peninsula and along Doran Beach. This route provides a coastal experience through State and County parkland to pedestrians, equestrians, and partially to bicyclists. The inland route generally parallels State Highway 1 along boardwalks, Class I Bikeways, and multiple use trails. This route connects the community and provides an important transportation corridor. The inland route the Class I segments of the Bodega Bay Pedestrian & Bicycle Trail. From Salmon Creek, the western route includes South Salmon Creek Beach, Bodega Dunes Trail (Lower/Upper?), Bodega Marine Life Refuge, Bodega Head Loop Trail and Doran Beach.

Owner/Manager: Various, State Parks, State – Caltrans, County, Private

Existing Status: Partially Acquired, Partially Developed

Acquisition Priority: See Table C-PA-1 below

Development Priority: See Table C-PA-1 below

Existing Improvements: None

Proposed Improvements and Programs:

1. Modify the Salmon Creek Bridge to provide safe pedestrian access including a barrier or other separation between trail users and motorized vehicle traffic on the eastern side to connect with the Coastal Trail on the Carrington Ranch addition to the State Park. Cross Highway 1 to the south of Salmon Creek and connect with the Bodega Bay Pedestrian & Bicycle Trail.

2. The following Class I Bikeway segments in the Bodega Bay Pedestrian & Bicycle Trail Study are designated as the California Coastal Trail: 1B, 1C, 2B, 3A, 3B-2, 3D-1, 3D-2, 5B, 6B, 6C, I, and J. Acquire and develop the designated California Coastal Trail segments of the Bodega Bay Pedestrian & Bicycle Trail Plan according to the priorities identified in the Bikeways Plan.
3. Designate the existing Lower Dunes Trail, the Overlook Trail, and the Bodega Head Trail as the California Coastal Trail.
4. Develop a trail from the Bodega Head Loop Trail to Campbell Cove to separate hikers from motorized traffic.
5. Study the feasibility of providing a water taxi from Campbell Cove to Doran Regional Park and pursue if feasible to connect the Class I Bikeway on Doran (section I and J).
6. Install the California Coastal Trail signage along all designated sections.

Table C-PA-1: Segments of the Bodega Bay Bicycle & Pedestrian Trail Plan Which Are Part of the California Coastal Trail

North to South	Sonoma Co. Bikeways Plan Project #	Bodega Bay Pedestrian & Bicycle Trail Plan Segment	Acquisition Priority	Development Priority	Notes
1	None	None	I	I	Salmon Creek Bridge Pedestrian Upgrade
2	None	None	I	I	Inland Route East of Highway 1, crosses Highway to join 1B
3	197f	1B, 1C, 2B	I	I	Inland Route. 1B and 1C are Existing.
4	197e	3A, 3B-2	I	I	Inland Route. Only the portion north of Porto Bodega SFC of 3A is designated California Coastal Trail
5	197g	3D-1, 3D-2	I	I	Inland Route
6	197c	5B, 6B	I	I	Inland Route
7	197c	6C	Existing	Existing	Inland Route
8	197a	I, J	None	II	Coastal Route

(I-16) Sonoma Coast State Park – South Salmon Creek Beach

(2001 County LCP reference: #57, page 85)

South Salmon Creek is one of the most important and heavily used beach access points on the Sonoma County Coast. Existing parking for 20 cars is inadequate, and roadside parking is incompatible with residential uses. Heavy use of the area has damaged and destabilized the dunes such that the parking area has periodically been covered by drifting sand. State Parks has undertaken a dune stabilization and revegetation project in selected areas, for which temporary closure of the parking area was necessary. Closure of the parking area may be necessary in the future for revegetation and dune stabilization.

The South Salmon Creek parking lot is usually inadequate on weekends, and overflow parking ends up on Bean Avenue, the road that provides access to the parking lot; and on private roads in the Salmon Creek Subdivision. Access along these narrow roads is very constrained.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	II
Existing Improvements:	40 day use parking spaces

Proposed Improvements and Programs:

1. Continue revegetation and dune stabilization.
2. Parking improvements for South Salmon Creek Beach identified by State Parks include: 1) expanding the South Salmon Creek parking lot; 2) constructing new parking lots further south along State Highway 1 and developing an alternative access to those lots; 3) moving the State Parks headquarters and using that area for parking and beach access; and 4) providing signs at both the Bean Avenue entrance to the South Salmon Creek parking lot and at the entrance to the Dunes Campground directing vehicles to an existing parking lot at the Dunes kiosk for overflow parking.

(I-17) Sonoma Coast State Park – Bodega Dunes Campground

(2001 County LCP reference: #58, page 85)

Direct access to the beach is available from several areas of the Bodega Dunes Campground.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	None
Existing Improvements:	98 campsites, restrooms, showers, RV dump station

Proposed Improvements and Programs:

1. Acquire the five parcels near the Roppolo Well to protect the dunes from development.
2. Consider providing a hostel or other alternative overnight facilities to serve the South Coast.

(I-18) Bodega Coastal Prairie Trail Property

(2001 County LCP reference: None)

This 34-acre property hosts the multi-purpose community center building, the Nicholas Green Bell Tower, and trails. Community groups lease the community center building for various activities, and the parking area is used for a farmer's market. The first of several phases of the Community Center has been developed.

Owner/Manager:	County
Existing Status:	Acquired and Partially Developed
Acquisition Priority:	None
Development Priority:	II
Existing Improvements:	Community center, memorial sculpture, 0.5-mile trail, day use parking

Proposed Improvements and Programs:

1. Extend the Coastal Prairie Trail, a segment of the Bodega Bay Pedestrian & Bike Trail and the California Coastal Trail, to Bayflat Road.
2. Study the feasibility of using the area with the building and access road for expanded recreational and/or educational purposes. Address Caltrans' egress safety concerns and pursue them if feasible.
3. Consider additional trail connections across the property and interpretive features.

(I-19) Bodega Marine Reserve and Laboratory

(2001 County LCP reference: #59, page 85)

The 362-acre Bodega Marine Reserve and Laboratory are owned by the University of California Davis and has limited public access. The Overlook Trail is a public pedestrian trail that traverses the Reserve and provides views of Horseshoe Cove. The trail connects with the Osprey Trail in the southern portion of the South Salmon Creek Beach and Bodega Dunes area. Although the remainder of the Reserve is closed to the public due to ongoing research, the University provides facility tours on a weekly basis and for special events.

Owner/Manager: State – University of California at Davis

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.8-mile trail

Proposed Improvements and Programs: None

(I-20) Sonoma Coast State Park – Bodega Head

(2001 County LCP reference: #60, page 86)

Bodega Head is a heavily used area for hiking, sunset viewing, photography, fishing, and other ocean-based activities. The Overlook Trail extends from this site across the dunes to the Bodega Dunes Campground.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: 2.1 miles of trail, restrooms, day use parking areas

Proposed Improvements and Programs:

1. Limit recreational development to passive day use activities to minimize conflicts with the Bodega Marine Reserve. Limit development to improving existing parking areas, restrooms, trails, and picnic facilities.
2. Develop an off-road trail from the existing Overlook Trail to Campbell Cove to provide a safe connection for the California Coastal Trail.

(I-21) Sonoma Coast State Park – Campbell Cove

(2001 County LCP reference: None)

Campbell Cove is on the north side of Bodega Head at the entrance to Bodega Harbor and is popular with fishermen, sightseers, bird watchers, and other visitors. Campbell Cove was the site of “The Hole in the Head” where Pacific Gas and Electric Company started to excavate for a nuclear power plant in the 1950s.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	III
Existing Improvements:	Interpretive signage, trail/boardwalk, picnic tables, day use parking

Proposed Improvements and Programs:

1. Connect Campbell Cove and Bodega Head by an off-road trail.
2. Enhance the site’s accessibility, visitor amenities, interpretative signage, and resource protection.

(I-22) Westside Regional Park

(2001 County LCP reference: #61, page 86)

Located on the west side of Bodega Harbor, Westside Regional Park provides camping and harbor access. In 2006 Regional Parks completed the connection of the restrooms to public sewer. In 2016 Regional Parks completed the renovation and expansion of the boat launching facilities, including 3 lane launch, docks, ADA kayak launch, fish cleaning station, and accessibility upgrades.

Owner/Manager:	County Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	II
Existing Improvements:	47 campsites, day use picnic area, fish cleaning station, boat rinsing station, RV dump station, 76 boat trailer spaces, and 31 day use parking spaces

Proposed Improvements and Programs:

1. Renovate the campground to improved experience, functionality, sustainability, and aesthetics.
2. Connect the park's boat washing facility and fish cleaning station to either a holding tank or public sewer.
3. Construct a trail separated from the road from Westside Regional Park south to West Side Trail at Sonoma Coast State Park to connect the campground to the greater trail system.

(I-23) Spud Point Marina

(2001 County LCP reference: pages 117-123 and #5 & #7, page 123)

Spud Point Marina was developed by the County in 1986 to accommodate commercial and recreational fishermen. A pier allows public access to view the bay as well as access to the harbor. Slips can accommodate boats up to 148 feet in length. The decline of the fishing industry and other factors has impacted the financial stability of the facility.

Owner/Manager:	County Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	Marina, 244 slips with electrical service, fuel dock, laundry facilities, waste pump-out station, restrooms, showers, fishing pier, parking area

Proposed Improvements and Programs:

1. Complete disabled access improvements to the berths and gangways.
2. Develop a master plan for the Marina and immediate environment to maximize public use for commercial and recreational fishing and boating related activities and provides for stable finances.

(I-24) Mason's Marina

(2001 County LCP reference: None)

Mason's Marina is owned by the County and was leased to a private marina operator since the 1960s. The lease expired in 2012, and the County resumed management. The marina needs extensive repairs to the docks, buildings, restrooms, wharfs/ piers and other facilities. Recently completed reports inventory the necessary repairs and the shift

from a commercial focus to a mixed use focus of commercial, recreational, and educational uses.

Owner/Manager:	County
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	Marina, 120 slips, electrical service, fuel dock, restrooms, showers, dry storage, parking area

Proposed Improvements and Programs:

1. Complete disabled access improvements to the berths and gangways.
2. Complete a feasibility study for the Marina and immediate environment to study the potential to support appropriate commercial, educational, and recreational fishing and boating related activities. If feasible, obtain funding and implement the plan.

(I-25) Bodega Bay Sport Fishing Center

(2001 County LCP reference: none)

The County enters into a license agreement with sport fishing boat operators to allow them use the Bodega Bay Sport Fishing Center for party boats for fishing, whale watching, pelagic bird watching, and sightseeing.

Owner/Manager:	County General Services/ County Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	Dock, berths, parking area

Proposed Improvements and Programs:

1. Complete disabled access renovations of the Parking, gangway consistent with the County wide ADA Transition plan.
2. Maintain the breakwater, pontoons, and gangways.
3. Consider paving parking lot to delineate spaces for safety and to accommodate use levels.
4. Consider moving the Sport Fishing Center activities to Mason's Marina to improve the amenities, accessibility, and consolidate the management of the County's marinas. Evaluate coastal dependent reuse options for the tidelands lease area now occupied for the Sport Fishing Center.

(I-26) Taylor Tract Trail

(2010 Bikeways Plan & Bodega Bay Pedestrian & Bicycle Trail: south portion of Trail 3A & 3B-1)

This Class I Bikeway follows the one-way portion of Bay Flat Road and provides an important connection between the businesses on State Highway 1 with the residences, businesses, Porto Bodega Sport Fishing Center, and the California Coastal Trail. This route begins at the intersection of Bay Flat Road and East Shore Road and continues to Taylor Street. This is the southern half of segment 3A and all of 3B-1 in the Bodega Bay Pedestrian & Bicycle Trail Plan or Projects 197E in the Bikeways Plan.

In 1984 a landslide removed Bay Flat Road's western travel lane and the remaining lane was designated as a one-way road. This proposed Class I Bikeway is contingent upon repairing and stabilizing the slope and may require retaining walls and other measures.

Owner/Manager:	County
Existing Status:	Proposed
Acquisition Priority:	I
Development Priority:	I
Existing Improvements:	None

Proposed Improvements and Programs:

1. Acquire easements if needed.
2. Construct Class I trail including retaining walls, safety barriers, switchbacks, and other measures necessary to provide safe access.

(I-27) Central Bodega Bay Commercial Access

(2001 County LCP reference: #62, page 86)

Existing commercial uses such as The Tides, Lucas Wharf, and Diekmann's Store provide physical and visual access to the harbor. The Coastal Conservancy purchased other parcels in the town to prohibit development, and these parcels also provide visual access. The proposed Bodega Bay Pedestrian & Bicycle Trail alignment is proposed through along the Central Bodega Bay Commercial area. Additional access opportunities may be possible.

Owner/Manager:	Coastal Conservancy, Private, Various/Private
Existing Status:	Acquired, Developed
Acquisition Priority:	None

Development Priority: III

Existing Improvements: Boardwalks, parking areas

Proposed Improvements and Programs:

1. Require that permits for expansion of existing uses, changing existing uses, establishment of new uses, and renewal of tideland leases with the County include a condition of approval for providing public access to Bodega Harbor, including the Proposed Improvements and Programs of the Bodega Bay Pedestrian & Bicycle Trails Plan.

(I-28) Bodega Harbor Yacht Club

(2001 County LCP reference: #63, page 86 and #9, page 123)

The Bodega Harbor Homeowners' Association leases the Yacht Club property from the County. The permit to operate should include provisions for public access to the parking area and pier. The Yacht Club is considered one of the best wind-sailing launch sites for Bodega Harbor, however closed gates and private signage prevents public access to Bodega Harbor at this county facility.

Owner/Manager: County – General Services/ Private

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: II

Existing Improvements: Boat launch, day use parking area

Proposed Improvements and Programs:

1. The County should work with the tenants to improve public access to the parking area and pier. Install signage notifying the public of access to Bodega Harbor.

(I-29) Birdwalk Coastal Access Trail

(2001 County LCP reference: #64, page 86)

The property previously known as the Old Airport Site has been used as a disposal site for dredge spoils. The Birdwalk Coastal Access Trail was constructed on the reclaimed perimeter berm of the disposal site, on the eastern side of Bodega Harbor. The site is still available for dredge spoil disposal and a 2003 Army Corps of Engineer Study identified the capacity of approximately 100,000 cubic yards.

In 2008 Regional Parks constructed a section of the California Coastal Trail from Birdwalk Coastal Access to Doran Regional Park over Cheney Gulch. The Bodega Bay

Bicycle & Pedestrian Plan identified continuing the Coastal Trail from the levee to Smith Brothers Road and beyond (Project #197c, 6B).

Owner/Manager:	County Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	1.2-mile trail, picnic tables, restroom, 10 day use parking spaces

Proposed Improvements and Programs:

1. Reclaim and revegetate the site when the disposal of dredge spoils is complete.
2. Construct a Class I Bikeway from the north property boundary of the Birdwalk Coastal Access property to the existing levee trail on the levee, approximately 0.3 miles.

(I-30) Doran Beach Regional Park

(2001 County LCP reference: #66, page 69; #65, page 86; page 93; page 100; page 103; #54-55, page 107)

Doran County Park provides public access to Doran Beach, Doran Pond, Bodega Harbor, and Bodega Bay. Boat launching, clamming, crabbing, fishing, diving, picnicking, nature observation, bird watching, and surfing are all popular activities at this heavily used park. The Bodega Bay Bicycle & Pedestrian Plan identified a Class I Bikeway along the length of the park (Project #197a, Sections I, J).

Owner/Manager:	County Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	II
Existing Improvements:	323 day use parking spaces, 138 camp sites, 1 group camp sites, 3 restrooms with showers, 4 restrooms without showers, boat launch with dock, fish cleaning station, RV dump station, boardwalk, monuments, other amenities.

Proposed Improvements and Programs:

1. Develop a restroom by the Gull and Shell Camp areas.
2. Develop an accessible ramp to the beach at the Jetty Day Use Area.

3. Complete boat launch improvements which include a new floating dock, accessibility upgrades, and armoring.
4. Study replacing pit toilets with new restrooms to improve water quality and accessibility.
5. Expand boardwalk, interpretive displays, and native dune grass restoration.
6. Study expanded day use parking.
7. Construct a Class I Bikeway along the length of the park.
8. Complete accessibility upgrades consistent with the County Transition Plan.
9. Develop a small visitor center to better provide visitor information and services.

(I-31) Links at Bodega Harbour Golf Course

(2001 County LCP reference: page 108)

Designed by Robert Trent Jones Jr., the Links at Bodega Harbour Golf Course is an 18-hole golf course with clubhouse and other facilities available to owners of property in the Bodega Harbour Subdivision. The back nine greens were opened in 1978, and the front nine greens were added in 1987. Renovations to the golf course were completed in 2008, in which over 96 bunkers were re-constructed and bentgrass was installed on all 18 greens. In 2012 the pro shop was moved outside the clubhouse to the opposite end of the parking lot.

Owner/Manager:	Private
Existing Status:	Developed
Acquisition Priority:	None
Development Priority:	III
Existing Improvements:	18-hole golf course, clubhouse, pro shop, golf warm-up facility, swimming pool, tennis courts, 89 parking spaces

Proposed Improvements and Programs:

1. Expand and upgrade the clubhouse and parking.
2. Construct a building for parking golf carts.

(I-32) California Coastal Trail: Bodega Harbor Subdivision to Marin County

(2001 County LCP reference: page 100 and #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The California Coastal Trail is a braided trail through this area and consists of two primary routes. The coastal and inland routes of the California Coastal Trail from Bodega Harbor to Marin County are intertwined with both the Bodega Bay and Valley Ford SubAreas.

The coastal route follows the shoreline of the Bodega Harbor subdivision from Doran Regional Park to the Marin County line at the Estero Americano. This pedestrian only route is limited to use during low tides, although portions can be accessed anytime from Doran Beach, Pinnacle Gulch Trail, and Short Tail Gulch Trail.

The inland route generally follows Highway 1 and Valley Ford Estero Road from the entrance of the Bodega Harbor subdivision to the Marin County line. Highway 1 is very steep through this area.

Owner/Manager:	Various, State Parks, State – Caltrans, County, Private
Existing Status:	Partially Acquired, Partially Developed
Acquisition Priority:	I
Development Priority:	I
Existing Improvements:	See individual access points

Proposed Improvements and Programs:

1. Study the long-term inland route alignment to provide a multi-use trail connecting Bodega Harbor with Marin County.
2. Designate the Highway 1 right-of-way as an alternative trail route until a continuous alignment consistent with Coastal Commission siting goals can be identified. Work with Caltrans to improve pedestrian and bicycle access.
3. Work with Marin County and other partners to connect the coastal route in Marin County.
4. Provide improved signage to existing Pinnacle Gulch and Short Trail Gulch Trails.

(I-33) Pinnacle Gulch Trail

(2001 County LCP reference: #66, page 86)

Dedicating and developing a coastal access trail along Pinnacle Gulch was required as a condition of approval of the Bodega Harbor Subdivision. The narrow access easement has experienced numerous landslides.

Owner/Manager: County Parks (Easement)
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: 0.5-mile trail, restrooms, 18 day use parking spaces

Proposed Improvements and Programs:

1. Maintain the trail and improve eroded sections.
2. If erosion persists, study options of relocating easements to more stable land.

(I-34) Short-Tail Gulch Trail

(2001 County LCP reference: #67, page 87)

An Offer of Dedication of a coastal access trail at the southern end of Bodega Harbor along Short-Tail Gulch was required as a condition of approval for the Bodega Harbour Subdivision. The trail was developed from Oyster Catcher Road to the beach, which is less than a mile north of the mouth of the Estero Americano. Parking is available approximately ½ mile away at Pinnacle Gulch and on the public streets. Six parking spaces were included approximately 150 feet from the trailhead, in the public road right of way at Oyster Catcher Road to serve the trail, but signs for these spaces have not been erected. It is possible to walk along the beach from the Estero Americano to Doran Beach at low tide.

Owner/Manager: County Parks (Easement)
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: I
Existing Improvements: 0.5-mile trail

Proposed Improvements and Programs:

1. Provide improved directional signage indicating public access trail and public parking locations from Highway 1 to Short Tail Gulch trailhead.

VALLEY FORD SUBAREA 10 (FIGURE C-PA-1K)

(J-1) California Coastal Trail: Bodega Harbor Subdivision to Marin County

(2001 County LCP reference: page 100 & #56-58, page 107; 2020 County General Plan; SB 908; AB 1396

The California Coastal Trail is a braided trail through this area and consists of two primary routes. The coastal and inland routes of the California Coastal Trail from Bodega Harbor to Marin County are intertwined with both the Bodega Bay and Valley Ford SubAreas.

The coastal route follows the shoreline of the Bodega Harbor subdivision from Doran Regional Park to the Marin County line at the Estero Americano. This pedestrian only route is limited to use during low tides, although portions can be accessed anytime from Doran Beach, Pinnacle Gulch Trail, and Short Tail Gulch Trail. The 2016 acquisition of the Estero Ranch by The Wildlands Conservancy may support additional Coastal Trail routes. The inland route generally follows Highway 1 and Valley Ford Estero Road from the entrance of the Bodega Harbor subdivision to the Marin County line. Highway 1 is very steep through this area and bicyclists have trouble negotiating the severe grades.

Owner/Manager: Various, State Parks, State – Caltrans, County, Private

Existing Status: Partially Acquired, Partially Developed

Acquisition Priority: I

Development Priority: I

Existing Improvements: See individual access points

Proposed Improvements and Programs:

1. Study the long-term inland route alignment to provide a multi-use trail connecting Bodega Harbor with Marin County.
2. Designate the Highway 1 right-of-way as an alternative trail route until a continuous alignment consistent with Coastal Commission siting goals can be identified. Work with Caltrans to improve pedestrian and bicycle access.
3. Work with Marin County and other partners to connect the Coastal Trail in Marin County.
4. Provide improved signage to Pinnacle Gulch and Short Trail Gulch Trails.

(J-2) Estero Americano Preserve

(2001 County LCP reference: #68, page 88)

The Sonoma Land Trust owns a 127 acre preserve off Estero Lane that provides limited guided hikes and limited guided canoe/kayak access to the Estero Americano. Access is only through infrequent scheduled guided outings available to the public. The preserve hosts a variety of research projects on water, wildlife, and coastal grassland management. School groups occasionally visit the Preserve to learn about the unique and fragile ecosystem of the Estero Americano.

The Sonoma Land Trust identified additional property in the lower half of the Estero as a “Secondary Conservation Target” for protecting the watershed, biotic resources, and visual access to the ocean in its November 1999 *Sonoma County Coastal Parcel Study*.

Owner/Manager: Sonoma Land Trust (Private)

Existing Status: Acquired, Partially Developed

Acquisition Priority: III

Development Priority: III

Existing Improvements: 20 informal parking spaces

Proposed Improvements and Programs:

1. Encourage additional low-impact support facilities to enhance nature education and interpretation.
2. Pursue acquisition of additional conservation and/or access easements to the Estero Americano from willing sellers.
3. Maintain agriculture and related infrastructure on the preserve to maximize grassland health and address fuel load management.

(J-3) Estero Americano Water Trail

(2001 County LCP reference: page 119)

The Estero Americano is a navigable waterway for at least six miles and as such, the areas below mean high tide are legally available to the public. The waterway has become popular with paddlers, including bird watchers and hunters because of the exceptional scenic and wildlife attributes. There is no developed access facility, and currently there is no identified agency that manages public access at the Estero. As recreational use levels have risen, adjacent private property owners have reported concerns with trespassing. About 3 miles of the western portion of the Estero is also part of the National Marine Sanctuary.

Owner/Manager: Waters of the US, Waters of the State/To Be Determined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: None

Proposed Improvements and Programs:

1. Create a maximum public access plan that manages the existing right to access the navigable waterway and protects the Estero and private property. The plan should protect the sensitive natural resources from overuse and prevent visitor impacts to private property and agricultural operations.

(J-4) Estero Americano Valley Ford Access

(2001 County LCP reference: #68, page 87)

A gravel road leads from Marsh Road off Valley Ford Estero Road to an unimproved parking area and a bulkhead for paddle craft access to the Estero Americano in Marin County. This is the only publicly accessible launch point to the Estero Americano.

In 2009 local property owners attempted to prevent an annual paddle craft race on the Estero Americano to protest impacts to their property from this historical use pattern. Complaints include litter, human waste, impacts to agriculture, and trespassing.

Owner/Manager: Private

Existing Status: Existing, Likely Prescriptive Access

Acquisition Priority: I

Development Priority: II

Proposed Improvements and Programs:

1. Retain the existing Marin County public access point by encouraging Marin County Parks & Open Space District to acquire fee title or record the easement and improve the access. Prescriptive rights may exist.
2. An agency responsible for public access should acquire and develop a similar access point in Sonoma County.
3. Encourage the installation of restrooms at one location between the existing launch point and the mouth of the Estero Americano.

(J-5) Estero Trail

(2001 County LCP reference: none)

The Sonoma County Agricultural Preservation & Open Space District acquired a conservation easement and trail easement over the Bordessa Ranch. The ranch remains privately owned. The State Coastal Conservancy required a trail access plan be developed as part of the acquisition.

Owner/Manager: Private/ County
Existing Status: Proposed
Acquisition Priority: Acquired (easement)
Development Priority: II

Proposed Improvements and Programs:

1. Complete the trail plan, including locating trails and parking areas consistent with the recorded easements.
2. Implement the plan in phases to allow adaptive management techniques to be fine-tuned to prevent impacts to grazing and natural resources.

(J-6) Estero Ranch

(2001 County LCP reference: none)

In 2015 The Wildlands Conservancy acquired a 547-acre preserve at the mouth of the Estero Americano and ocean. The acquisition secured a conservation easement, and included public funding and the requirement for public access. A management plan under development will balance appropriate public access to the bluff, estuary, and coast with ecological protection.

Owner/Manager: The Wildlands Conservancy (Private)
Existing Status: Acquired, Partially Developed
Acquisition Priority: None
Development Priority: I

Proposed Improvements and Programs:

1. Plan and develop appropriate public access, education, and research compatible with the site's fragile ecosystem.
2. Maintain agriculture and related infrastructure on the preserve to support grassland health.

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PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

APPENDIX C: RIGHT TO FARM ORDINANCE September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX C: RIGHT TO FARM ORDINANCE

(ORDINANCE NO. 5203)

AN ORDINANCE OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SONOMA, STATE OF CALIFORNIA, ADDING SECTIONS 7-11.75, 25-12.75, 26-88-170, AND 26C-451.5 TO THE SONOMA COUNTY CODE, AND REPEALING AND RE-ENACTING ARTICLE II OF CHAPTER 30 OF THE SONOMA COUNTY CODE, THE SONOMA COUNTY RIGHT TO FARM ORDINANCE

The Board of Supervisors of the County of Sonoma, State of California, ordains as follows:

SECTION I. Section 7-11.75 of the Sonoma County Code is added to read:

Sec. 7-11.75. Compliance with right to farm ordinance.

Any building or structure subject to the provisions of this chapter shall comply with the right to farm ordinance set forth in Chapter 30 of this code.

SECTION II. Section 25-12.75 is added to the Sonoma County Code to read:

Sec. 25-12.75. Compliance with right to farm ordinance.

Any subdivision subject to the provisions of this chapter shall comply with the right to farm ordinance set forth in Chapter 30 of this code.

SECTION III. Section 26-88-170 is added to the Sonoma County Code to read:

Sec. 26-88-170. Compliance with right to farm ordinance.

Any use subject to the provisions of this chapter shall comply with the right to farm ordinance set forth in Chapter 30 of this code.

SECTION IV. Section 26C-451.5 is added to the Sonoma County Code to read:

Sec. 26C-451.5. Compliance with right to farm ordinance.

Any use subject to the provisions of this chapter shall comply with the right to farm ordinance set forth in Chapter 30 of this code.

SECTION V. Article II of Chapter 30 of the Sonoma County Code is repealed and re-enacted to read:

Article II. Right to Farm.

Sec. 30-20. Short Title.

This article shall be known and may be cited as the Sonoma County Right to Farm Ordinance or the Right to Farm Ordinance.

Sec. 30-21. Findings.

(a) It is the declared policy of this county to conserve, protect, enhance, and encourage agricultural operations on agricultural land within the unincorporated area of the county. Further, it is the intent of this county to provide its residents proper notification of the county's recognition and support, through this article, of the right to farm.

(b) Where non-agricultural land uses, particularly residential and commercial development, extend onto agricultural land or exist side by side, agricultural operations are frequently the subject of nuisance complaints. As a result, some agricultural operations are forced to cease or curtail their operations and many others are discouraged from making investments in improvements to their operations, all to the detriment of adjacent agricultural uses and the economic viability of the county's agricultural industry as a whole. It is the purpose and intent of this article to reduce the loss to the county of its agricultural resources by limiting the circumstances under which properly conducted agricultural operations on agricultural land may be considered a nuisance.

(c) It is the further purpose and intent of this article to promote a good-neighbor policy by requiring notification of owners, purchasers, residents, and users of property adjacent to or near agricultural operations on agricultural land of the inherent potential problems associated with being located near such operations, including, without limitation, noise, odors, fumes, dust, smoke, insects, operation of machinery during any time of day or night, storage and disposal of manure, and ground or aerial application of fertilizers, soil amendments, seeds, and pesticides. It is intended that, through mandatory disclosures, owners, purchasers, residents, and users will better understand the impact of living or working near agricultural operations and be prepared to accept attendant conditions from properly conducted agricultural operations as a normal and necessary aspect of living in a county with a strong rural character and an active agricultural sector.

(d) It is the further purpose and intent of this article to carry out and advance the goals, objectives, policies, and implementation programs of the agricultural resources element of the general plan.

Sec. 30-22. Relationship to other laws.

This article is not intended to, and shall not be construed or given effect in a manner that modifies or abridges federal law or regulation, or state law as set out in the Civil Code, Health and Safety Code, Fish and Game Code, Food and Agricultural Code, Division 7 of the Water Code, or any other applicable provision of state law relative to nuisances; instead, this article is only to be utilized in the interpretation and enforcement of provisions of this code and county regulations. Further, this article is not intended to, and shall not be construed or given effect in a manner that limits or restricts the county's authority to review and approve or disapprove proposals for agricultural operations on agricultural land in accordance with other provisions of this code or other laws.

Sec. 30-23. Schedule of fees and charges.

The board of supervisors may from time to time establish a schedule of fees and charges following the procedures required by law to recover the reasonable cost of providing services, issuing permits, recording documents, and enforcing regulations pursuant to this article.

Sec. 30-24. Definitions.

Unless the provision or context otherwise requires, the definitions contained in this section shall govern the construction of this article. The definition of a word or phrase applies to any of that word's or phrase's variants.

"Adjacent to agricultural land" means within 300 feet of agricultural land.

"Agricultural land" means all that real property within the unincorporated area of the county designated as land intensive agriculture, land extensive agriculture, or diverse agriculture by the general plan and zoning ordinance.

"Agricultural operation" means and includes, but shall not be limited to, the cultivation and tillage of the soil, dairying, the production, irrigation, frost protection, cultivation, growing, harvesting, processing, and storing of any agricultural commodity, including viticulture, horticulture, timber, or apiculture, the raising of livestock, fur bearing animals, fish, or poultry, and any commercial agricultural practices performed incident to or in conjunction with such operations, including preparation for market, delivery to storage or to market, or delivery to carriers for transportation to market.

"Development approval" means all of the following:

(a) Any discretionary approval granted pursuant to Chapter 25, 26, or 26C of this code to allow residential or commercial development of land, including, without limitation, any approval of a zone change, tentative map, lot line adjustment, use permit, or design review.

(b) Any building permit issued pursuant to Chapter 7 of this code to allow construction of a new single-family dwelling, enlargement of an existing single-family dwelling by six hundred forty (640) square feet or more of floor area, or installation of a manufactured home.

"Director of permit and resource management" means the director of permit and resource management of the county or his or her authorized representative.

"General plan" means the Sonoma County General Plan.

"Properly conducted agricultural operation" means an agricultural operation that is in conformance with existing laws and regulations and proper and accepted customs and standards.

"Treasurer/tax collector" means the treasurer/tax collector of the county or his or her authorized representative.

"Zoning ordinance" means the Sonoma County Zoning Ordinance set forth in Chapter 26 of this code or the Sonoma County Coastal Zoning Ordinance set forth in Chapter 26C of this code, as appropriate.

Sec. 30-25. Nuisance - agricultural operation.

No agricultural operation conducted or maintained on agricultural land in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations in the county, shall be or become a nuisance for purposes of this code or county regulations if it was not a nuisance when it began, provided that such operation complies with the requirements of all applicable federal, state, and county statutes, ordinances, rules, regulations, approvals, and permits. The provisions of this section shall not apply where a nuisance results from the negligent or improper management or operation of an agricultural operation.

Sec. 30-26. Disclosure of article to current owners.

The treasurer/tax collector shall cause the following notice to be mailed to all owners of real property within the county with the annual tax bill:

The County of Sonoma permits the operation of properly conducted agricultural operations on agricultural land within the unincorporated area of Sonoma County, and has declared it County policy in the Sonoma County Right to Farm Ordinance (Sonoma County Code, Chapter 30, Article II) to conserve, protect, enhance, and encourage such operations. Residents or users of property located near an agricultural operation on agricultural land may at times be subject to inconvenience or discomfort arising from that operation, including, without limitation, noise, odors, fumes, dust, smoke, insects, operation of machinery during any time of day or night, storage and disposal of manure, and ground or aerial application of fertilizers, soil amendments, seeds, and

pesticides. One or more of these inconveniences or discomforts may occur as result of any properly conducted agricultural operation on agricultural land. The County of Sonoma has determined in the Sonoma County Right to Farm Ordinance that inconvenience or discomfort arising from a properly conducted agricultural operation on agricultural land will not be considered a nuisance for purposes of the Sonoma County Code or County regulations, and that residents or users of nearby property should be prepared to accept such inconvenience or discomfort as a normal and necessary aspect of living in a county with a strong rural character and an active agricultural sector. For more information about the Sonoma County Right to Farm Ordinance, please contact the Sonoma County Agricultural Commissioner's office at 2604 Ventura Avenue, Santa Rosa, CA 95403.

Sec. 30-27. Disclosure of article in development approvals.

Where a development approval is sought on or adjacent to agricultural land, the property owner, as part of the application for the development approval, shall execute a declaration acknowledging the right to farm. The director of permit and resource management shall cause the declaration to be recorded in the office of the county recorder upon granting of the development approval, unless a declaration acknowledging the right to farm has already been recorded for the property pursuant to this section, in which case the declaration need not be recorded. The declaration shall be in substantially the following form:

DECLARATION ACKNOWLEDGING RIGHT TO FARM

The undersigned do hereby certify to be the owner(s) of certain real property located in Sonoma County, California, and more particularly described in Exhibit "A," attached hereto and incorporated herein by this reference ("the subject property").

The undersigned do hereby acknowledge that the subject property is located on or adjacent to agricultural land, as defined in the Sonoma County Right to Farm Ordinance (Sonoma County Code, Chapter 30, Article II). The undersigned do hereby further acknowledge that the County of Sonoma permits the operation of properly conducted agricultural operations on agricultural land within the unincorporated area of Sonoma County, and has declared it County policy in the Sonoma County Right to Farm Ordinance to conserve, protect, enhance, and encourage such operations. The undersigned do hereby further acknowledge that if the subject property is located near an agricultural operation on agricultural land, residents or users of the subject property may at times be subject to inconvenience or discomfort arising from that operation, including, without limitation, noise, odors, fumes, dust, smoke, insects, operation of machinery during any time of day or night, storage and disposal of manure, and ground or aerial application of fertilizers, soil

amendments, seeds, and pesticides. The undersigned do hereby further acknowledge that one or more of these inconveniences or discomforts may occur as a result of any properly conducted agricultural operation on agricultural land. The undersigned do hereby further acknowledge that the County of Sonoma has determined in the Sonoma County Right to Farm Ordinance that inconvenience or discomfort arising from a properly conducted agricultural operation on agricultural land will not be considered a nuisance for purposes of the Sonoma County Code or County regulations, and that residents or users of nearby property should be prepared to accept such inconvenience or discomfort as a normal and necessary aspect of living in a county with a strong rural character and an active agricultural sector.

This Declaration shall run with the subject property in perpetuity and shall be binding upon the undersigned and the undersigned's heirs, personal representatives, lessees, executors, successors, and assigns. This Declaration and the acknowledgments contained herein shall be disclosed to prospective transferees of any interest in the subject property, including, without limitation, a leasehold interest, prior to any such transfer.

IN WITNESS WHEREOF, the undersigned has/have executed this Declaration this _____ day of _____, 19__.

DECLARANT(S)

Dated: _____

Dated: _____

NOTE: ACKNOWLEDGMENTS MUST BE ATTACHED FOR ALL SIGNATORIES.

Sec. 30-28. Disclosure of article to buyers of real property.

(a) Where a transfer of real property by sale, exchange, installment land sale contract, lease with an option to purchase, any other option to purchase, ground lease coupled with improvements, or residential stock cooperative improved with one to four dwelling units is proposed for any real property within the unincorporated area of the county, the transferor shall disclose this article and the nature of its provisions to the prospective transferee in one of the following ways:

(1) Deliver a general disclosures and disclaimers advisory to the prospective transferee pursuant to local real estate practice that includes a statement disclosing this article and the nature of its provisions. The statement shall be in substantially the following form:

The County of Sonoma permits the operation of properly conducted agricultural operations on agricultural land within the unincorporated area of Sonoma County, and has declared it County policy in the Sonoma County Right to Farm Ordinance (Sonoma County Code, Chapter 30, Article II) to conserve, protect, enhance, and encourage such operations. If the property you are purchasing is located near an agricultural operation on agricultural land, residents or users of the property may at times be subject to inconvenience or discomfort arising from that operation, including, without limitation, noise, odors, fumes, dust, smoke, insects, operation of machinery during any time of day or night, storage and disposal of manure, and ground or aerial application of fertilizers, soil amendments, seeds, and pesticides. One or more of these inconveniences or discomforts may occur as a result of any properly conducted agricultural operation on agricultural land. The County of Sonoma has determined in the Sonoma County Right to Farm Ordinance that inconvenience or discomfort arising from a properly conducted agricultural operation on agricultural land will not be considered a nuisance for purposes of the Sonoma County Code or County regulations, and that residents or users of nearby property should be prepared to accept such inconvenience or discomfort as a normal and necessary aspect of living in a county with a strong rural character and an active agricultural sector. For more information about the Sonoma County Right to Farm Ordinance, please contact the Sonoma County Agricultural Commissioner's office at 2604 Ventura Avenue, Santa Rosa, CA 95403.

(2) Deliver a disclosure statement to the prospective transferee pursuant to Article 1.5 (commencing with Section 1102) of Chapter 2 of Title 4 of Part 4 of Division 2 of the Civil Code disclosing this article and the nature of its provisions. The disclosure statement shall be in substantially the following form:

LOCAL OPTION

REAL ESTATE TRANSFER DISCLOSURE STATEMENT

THIS DISCLOSURE STATEMENT CONCERNS THE REAL PROPERTY SITUATED IN THE UNINCORPORATED AREA OF THE COUNTY OF SONOMA, STATE OF CALIFORNIA, DESCRIBED AS (Address and Assessor's Parcel Number(s)). THIS STATEMENT IS A DISCLOSURE OF THE CONDITION OF THE ABOVE DESCRIBED PROPERTY IN COMPLIANCE WITH SECTION 30-28 OF THE SONOMA COUNTY CODE AS OF (date). IT IS NOT A WARRANTY OF ANY KIND BY THE SELLER(S) OR ANY AGENT(S) REPRESENTING ANY PRINCIPAL(S) IN THIS TRANSACTION, AND IS NOT A SUBSTITUTE FOR ANY INSPECTIONS OR WARRANTIES THE PRINCIPAL(S) MAY WISH TO OBTAIN.

SELLERS INFORMATION

The Seller discloses the following information with the knowledge that even though this is not a warranty, prospective Buyers may rely on this information in deciding whether and on what terms to purchase the subject property. Seller hereby authorizes any agent(s) representing any principal(s) in this transaction to provide a copy of this statement to any person or entity in connection with any actual or anticipated sale of the property.

THE FOLLOWING ARE REPRESENTATIONS MADE BY THE SELLER(S) AS REQUIRED BY THE COUNTY OF SONOMA, AND ARE NOT THE REPRESENTATIONS OF THE AGENT(S), IF ANY. THIS INFORMATION IS A DISCLOSURE AND IS NOT INTENDED TO BE PART OF ANY CONTRACT BETWEEN THE BUYER AND SELLER.

The County of Sonoma permits the operation of properly conducted agricultural operations on agricultural land within the unincorporated area of Sonoma County, and has declared it County policy in the Sonoma County Right to Farm Ordinance (Sonoma County Code, Chapter 30, Article II) to conserve, protect, enhance, and encourage such operations. If the property you are purchasing is located near an agricultural operation on agricultural land, residents or users of the property may at times be subject to inconvenience or discomfort arising from that operation, including, without limitation, noise, odors, fumes, dust, smoke, insects, operation of machinery during any time of day or night, storage and disposal of manure, and ground or aerial application of fertilizers, soil amendments, seeds, and pesticides. One or more of these inconveniences or discomforts may occur as a result of any properly conducted agricultural operation on agricultural land. The County of Sonoma has determined in the Sonoma County Right to Farm Ordinance that inconvenience or discomfort arising from a properly conducted agricultural operation on agricultural land will not be considered a nuisance for purposes of the Sonoma County Code or County regulations, and that residents or users of nearby property should be prepared to accept such inconvenience or discomfort as a normal and necessary aspect of living in a county with a strong rural character and an active agricultural sector. For more information about the Sonoma County Right to Farm Ordinance, please contact the Sonoma County Agricultural Commissioner's office at 2604 Ventura Avenue, Santa Rosa, CA 95403.

Seller certifies that the information herein is true and correct to the best of the Seller's knowledge as of the date signed by the Seller.

Seller _____ Date _____

Seller _____ Date _____

BUYER(S) AND SELLER(S) MAY WISH TO OBTAIN PROFESSIONAL ADVICE AND/OR INSPECTIONS OF THE PROPERTY AND TO PROVIDE FOR APPROPRIATE PROVISIONS IN A CONTRACT BETWEEN BUYER(S) AND SELLER(S) WITH RESPECT TO ANY ADVICE/INSPECTIONS/DEFECTS.

I/WE ACKNOWLEDGE RECEIPT OF A COPY OF THIS STATEMENT.

Seller _____ Date _____

Seller _____ Date _____

Buyer _____ Date _____

Buyer _____ Date _____

Agent (Broker
Representing Seller) _____ By _____ Date _____
(Associate Licensee
or Broker-Signature)

Agent (Broker
Obtaining the Offer) _____ By _____ Date _____
(Associate Licensee
or Broker-Signature)

A REAL ESTATE BROKER IS QUALIFIED TO ADVISE ON REAL ESTATE. IF YOU DESIRE LEGAL ADVICE, CONSULT YOUR ATTORNEY.

(b) If a prospective transferee refuses to sign the general disclosures and disclaimers advisory or disclosure statement required by subsection (a), the transferor may comply with the requirements of this section by delivering the advisory or statement to the prospective transferee as provided in subsection (a) and affixing and signing the following declaration to the advisory or statement:

"I, (name), have delivered a copy of the foregoing (general disclosures and disclaimers advisory/disclosure statement) as required by Section 30-28 of the Sonoma County Code to (transferee's name), who has refused to sign.

I declare the foregoing to be true.

Date: _____ Signature: _____ Print Name: _____

Sec. 30-29. Noncompliance with article.

Noncompliance with any provision of this article shall not affect title to real property, nor prevent the recording of any document.

SECTION VI. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional and invalid, such decision shall not affect the validity of the remaining portion of this ordinance. The Board of Supervisors hereby declares that it would have passed this ordinance and every section, subsection, sentence, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared unconstitutional or invalid.

SECTION VII. This ordinance shall be and the same is hereby declared to be in full force and effect from and after thirty (30) days after the date of its passage and shall be published once before the expiration of fifteen (15) days after said passage, with the names of the Supervisors voting for or against the same, in *The Press Democrat*, a newspaper of general circulation published in the County of Sonoma, State of California.

In regular session of the Board of Supervisors of the County of Sonoma, passed and adopted this day of , 2012, on regular roll call of the members of said Board by the following vote:

SUPERVISORS:

Brown	Rabbitt	Carrillo	McGuire	Zane
AYES	NOES	ABSENT	ABSTAIN	

WHEREUPON, the Chair declared the above and foregoing ordinance duly adopted and

SO ORDERED.

Chair, Board of Supervisors
County of Sonoma

ATTEST:

Veronica A, Ferguson, Clerk of the Board of Supervisors

PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

APPENDIX D: SCENIC RESOURCES September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX D: SCENIC RESOURCES

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APPENDIX D: SCENIC RESOURCES

1. SCENIC VIEW EASEMENTS

(Adopted by Board of Supervisors' Resolution #71611, April 20, 1982)

As a part of the legislative solution to the question of development of The Sea Ranch, the Coastal Act has been amended by the addition of Subsection 30610.6 (d) which instructs the executive director to "specifically identify the areas along State Highway One for which scenic view easements...will be required." Subsection 30610.6 (c) states that these easements are to be established for the purpose of allowing for the removal of trees in order to restore and preserve scenic views from the highway.

Using the Commission's current Overall Conditions and Findings for The Sea Ranch, plus the Sonoma County LCP, as starting points, the staff has identified those areas for which easements will be required. Below is a list of such areas as well as a recommendation for tree removal at each site. These recommendations are designed to be both an aid in directing the eventual removal of the trees as well as a means of ensuring that drainage areas within each easement will not be subject to increased erosion due to tree removal.

Easements and Tree Removal Guidelines

Unit 15

Easement – All the common area in this unit shall be subject to a scenic view easement.

Tree Removal Guideline – South of the Yardarm Drive entrance all trees within 50 feet of the entrance shall be removed, as shall all trees along the southernmost 200 feet of Yardarm Drive. Trees should be removed to open coastal views throughout the easement north of the entrance. (See Map A)

Unit 11

Easement – The easement shall be a 20-foot wide strip running the length of the area tentatively identified as Unit 11, adjacent to Highway One frontage. (See Map B)

Tree Removal Guideline – Trees should be thinned and removed where necessary to open coastal view.

Unit 1

Easement – The easement shall encompass all of the common area behind the Moonraker Recreation Area and Block 5. (See Map C)

Tree Removal Guideline – To open a downcoast view to Black Point trees behind the Moonraker Recreation Center shall be trimmed and thinned, gradually giving way to the creation of a clearing behind Captain's Close.

Moonraker Road

Easement – An easement shall extend 200' seaward along the first 400' of Highway One frontage, south of Moonraker Road. (See Map C)

Tree Removal Guideline – Trees in this area shall be removed.

Unit 7

Easement – Starting at the northern hedgerow, the easement extends across the common area between Highway One and the rear of Block 2 and the lot reserved for a recreation area. (See Map D)

Tree Removal Guideline – Remove only those Bishop Pines in the area behind Lots 4-9. Leave all the trees in the vicinity of Annapolis Road.

Unit 18

Easement 1 – The easement begins at the southernmost hedgerow and proceeds southward across the common area between Highway One, Mariners Drive and Lot 102. It then continues along the highway frontage, maintaining the width established between the southeastern corner of Lot 102 and the highway until it terminates at the boundary of this unit and Unit 17. (See Map E)

Tree Removal Guideline – All the young Bishop Pines along the fence shall be removed.

Easement 2 – The easement includes all the common area south of Whitesurf Road, between Lots 38-42 and Highway One. (See Map E)

Tree Removal Guideline – Remove most of the trees in this area.

Sea Ranch Stables

Easement – In the portion of the stables area north of the hedgerow (above Unit 21, Lots 130-140), an easement shall extend southward 200' from the northeast leg of the boundary with Unit 21. In addition, a 20' wide easement, adjacent to Highway One frontage, shall extend south to the hedgerow. (See Map F)

Tree Removal Guideline – Trees along the boundary with Unit 21 shall be topped and trimmed to maintain the northern view across the unit. Trees in the strip along the highway shall be removed where necessary to restore lateral coastal views.

Unit 21

Easement 1 – Includes all common land south of the northern hedgerow to Breaker Reach, bordered by Hedgegate Road on the west. (See Map F)

Tree removal Guideline – Remove all the trees in this area to restore the best downcoast view in The Sea Ranch.

Easement 2 – The easement extends from the Breaker Reach entrance to the Vantage Road entrance. This easement is bordered on the west by Greenvale Close and the lots fronting on that street, down to Lot 8. The easement ends at a straight line between the northwest corner of Lot 8 and the southwest corner of Lot 31. (See Map F)

Tree Removal Guideline – Widen the view down Breaker Reach by cutting the Bishop Pines just south of the entrance. Top and thin trees between Lots 31-34 and 7-8 to maintain a clear downcoast view over this area. It is noted, however, that extensive cutting in this area is not recommended because of the drainage course at this site. Trees behind Lots 4-6 should be thinned. The trees from behind Lot 3 to the Vantage Road entrance should be removed.

Easement 3 – This easement starts at the Vantage Road entrance and extends southward, between Sentinel Close and Highway One, to the boundary between this unit and The Sea Ranch Stables. (See Map f)

Tree Removal Guideline – The young pines in this area should be removed, but the wind stunted redwoods and brush in the southern drainage area should remain to prevent increased erosion.

Easement 4 – The easement begins at the northern hedgerow and extends northward behind Lots 42, 43, and 44, and terminates at the end of this unit. (See Map G)

Tree Removal Guideline – Removal all the young pines along the fence.

Unit 24

Easement – To widen the view down Whalebone Road an easement shall be established to include all the common area south of Whalebone, between Highway One and the rear of Lots 158 and 159. (Note: Pursuant to Coastal Act Subsection 30610.6 (c)(2) this area is also the site of a six vehicle parking area. This scenic easement is intended to cover that portion of the designated area that is not used for parking.) (See Map G)

Tree Removal Guideline – Removal all the trees in this area.

Unit 28

Easement 1 – An easement shall be established to include all common area south of the northern hedgerow to Leeward Spur, between Highway One and Leeward Road. (See Map H)

Tree Removal Guideline – Thin and remove trees in the easement area to restore a view across the entire unit. No trees should be removed between Lots 6 and 7 to avoid exacerbating erosion in the small drainage area.

Easement 2 – This easement extends across all the common area bordered by Leeward Spur, Leeward Road and the southern hedgerow. (See Map H)

Tree Removal Guideline – Thin trees to restore view of the coast.

2. SCENIC VIEW GUIDELINES

Development

Screening with Topography and Vegetation. New structures shall be sited and designed to take maximum advantage of existing topography and vegetation in order to substantially screen them from view from public roads and use areas.

Ocean and Coastline View Preservation. New structures shall be sited and designed to preserve existing views of the ocean and coastline from public roads and use areas.

Open Areas on Ridgeline and Hilltops. Development of highly visible open areas on ridgelines and hilltops shall be avoided.

Silhouette Projections. New structures shall not be located on ridgelines or hilltops or so that they project above the silhouette of the ridgeline or hilltop against the sky as viewed from public roads and use areas.

Cuts and Fills. Visible cuts and fills on ridgelines and hilltops shall be minimized.

Structure Cluster. To the extent feasible, structures shall be clustered on each parcel within existing built areas and near existing natural features such as tree groupings.

Driveways and Access Roads. Driveways and access roads shall be substantially screened from views from public roads and use areas where practical.

Tree and Vegetation Removal. Removal of trees and other mature vegetation shall be minimized. Removal of specimen trees, tree groupings, and tree Windbreaks shall be avoided. Where removal of trees is a necessary result of a proposed project, the trees shall be replaced at a greater than 1:1 ratio at another location on the site or at an off-site location approved by Permit Sonoma.

Existing Vegetation and Topography. After new structures have been constructed, existing vegetation or topography shall not be altered or removed if it would expose the new structures to view from public roads and use areas.

Landscaping. Where existing topography and vegetation would not screen structures from view from public roads and use areas, landscaping consisting of native vegetation in natural groupings that fit with the character of the area shall be installed in order to substantially screen structures from view. Screening with native, fire-retardant plants may be required.

Building Material. Structures shall be designed to use building materials and color schemes that blend with the natural landscape and vegetation.

Satellite Dishes. Satellite dishes requiring a building permit shall be sited such that they are not visible in views from public roads and use areas.

Minimize Visual Impacts. If compliance with these standards would make a parcel unbuildable, structures shall be sited and designed so that minimum visual impacts would result.

3. VIEW PROTECTION GUIDELINES

View Protection

Development within Scenic Landscape Units, Major Views, and views from Vista Points shall be required to meet the following criteria in addition to all other applicable design guidelines in order to be consistent with **Policy C-OSRC-1f**. In the case of conflict, the most restrictive design standards shall apply:

Structure Site. New structures shall be sited and designed to take maximum advantage of existing topography and vegetation in order to substantially screen them from view from public roads and use areas.

Ocean and Coastline Views. New structures shall be sited and designed to preserve existing views of the ocean and coastline from public roads and use areas.

Development in High Visible Areas. Development of highly visible open areas on ridgelines and hilltops shall be avoided.

Ridgelines and Hilltops. New structures shall not be located on ridgelines or hilltops or so that they project above the silhouette of the ridgeline or hilltop against the sky as viewed from public roads and use areas.

Cuts and Fills. Visible cuts and fills on ridgelines and hilltops shall be minimized.

Cluster Structures. To the extent feasible, structures shall be clustered on each parcel within existing built areas and near existing natural features such as tree groupings.

Driveways and Access Roads. Driveways and access roads shall be substantially screened from views from public roads and use areas where practical.

Tree and Vegetation Removal. Removal of trees and other mature vegetation shall be minimized. Removal of specimen trees, tree groupings, and tree Windbreaks shall be avoided. Where removal of trees is a necessary result of a proposed project, the trees shall be replaced at a greater than 1:1 ratio at another location on the site or at an off-site location approved by Permit Sonoma.

Existing Vegetation and Topography. After new structures have been constructed, existing vegetation or topography shall not be altered or removed if it would expose the new structures to view from public roads and use areas.

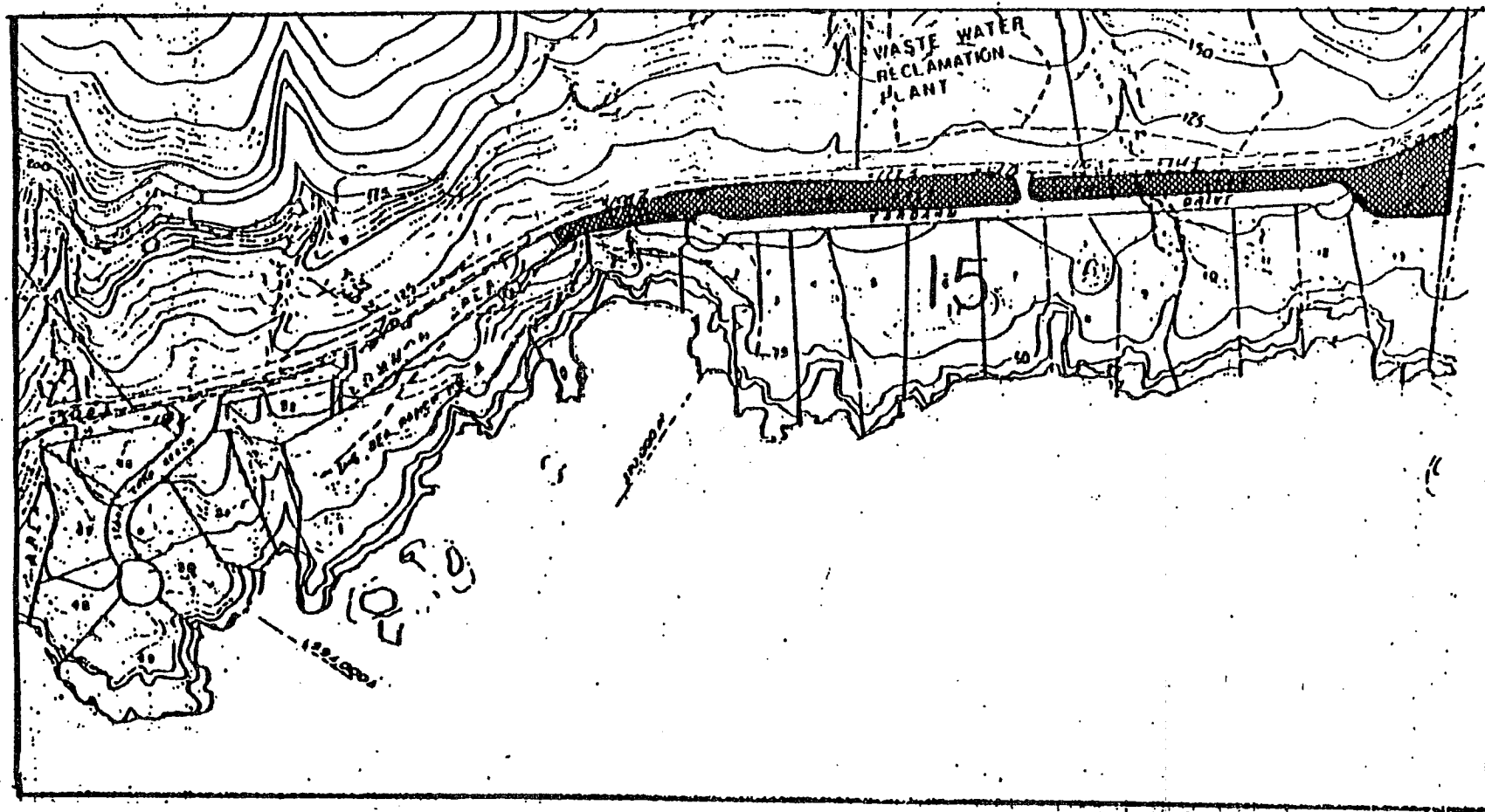
Structure Screening. Where existing topography and vegetation would not screen structures from view from public roads and use areas, landscaping consisting of native vegetation in natural groupings that fit with the character of the area shall be installed in order to substantially screen structures from view. Screening with native, fire-retardant plants may be required.

Building Materials and Colors. Structures shall be designed to use building materials and color schemes that blend with the natural landscape and vegetation.

Satellite Dishes. Satellite dishes requiring a building permit shall be sited such that they are not visible in views from public roads and use areas.

Minimize Visual Impacts. If compliance with these standards would make a parcel unbuildable, structures shall be sited where minimum visual impacts would result.

(GP2020 / Existing LCP Revised)

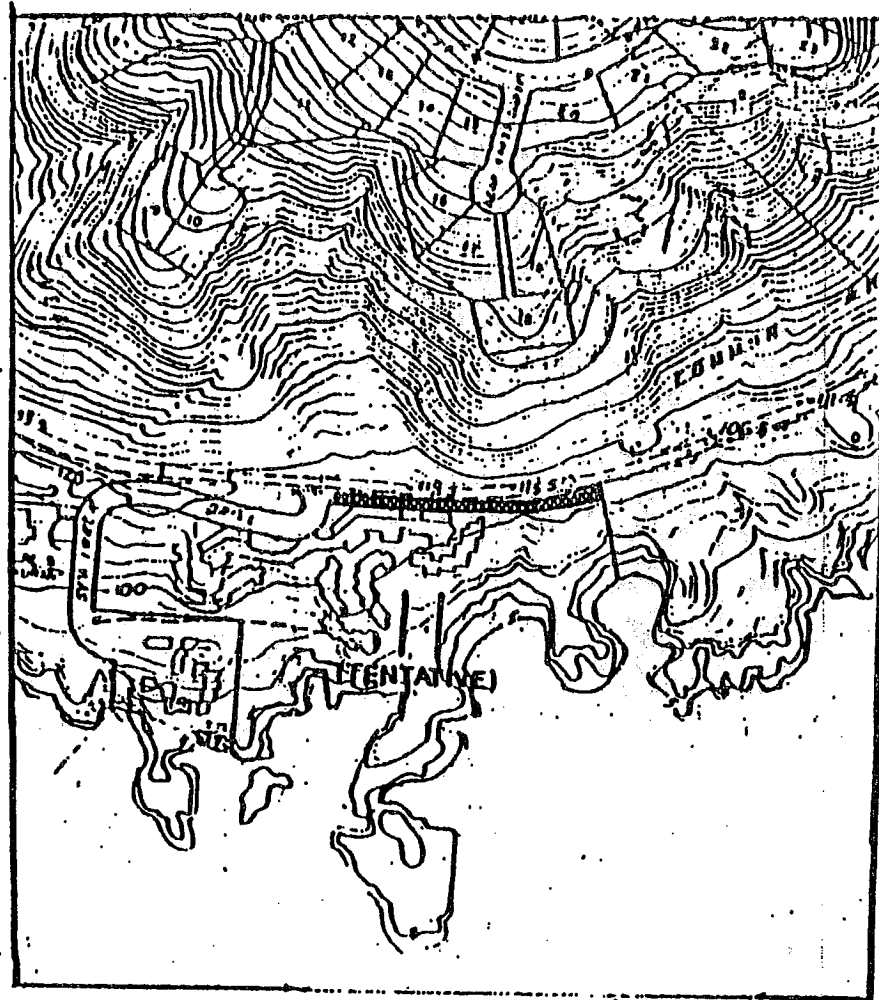


Map A, Unit 15

Designated Easement Area

Scale 1" = 400'

Portion of the Sea Ranch Composite Map
 Prepared by Brelje and Race
 August 1970 Revised August 1972

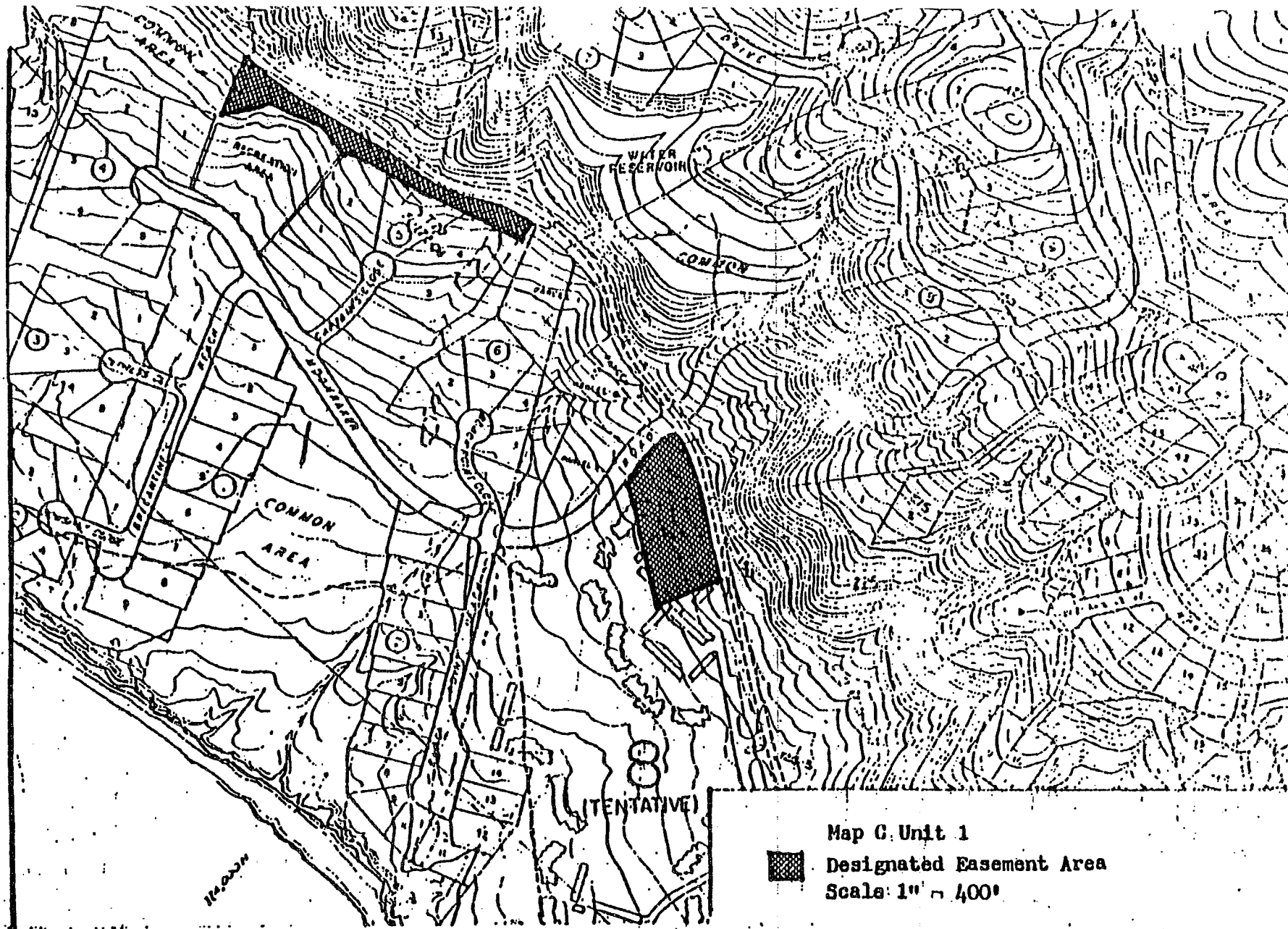


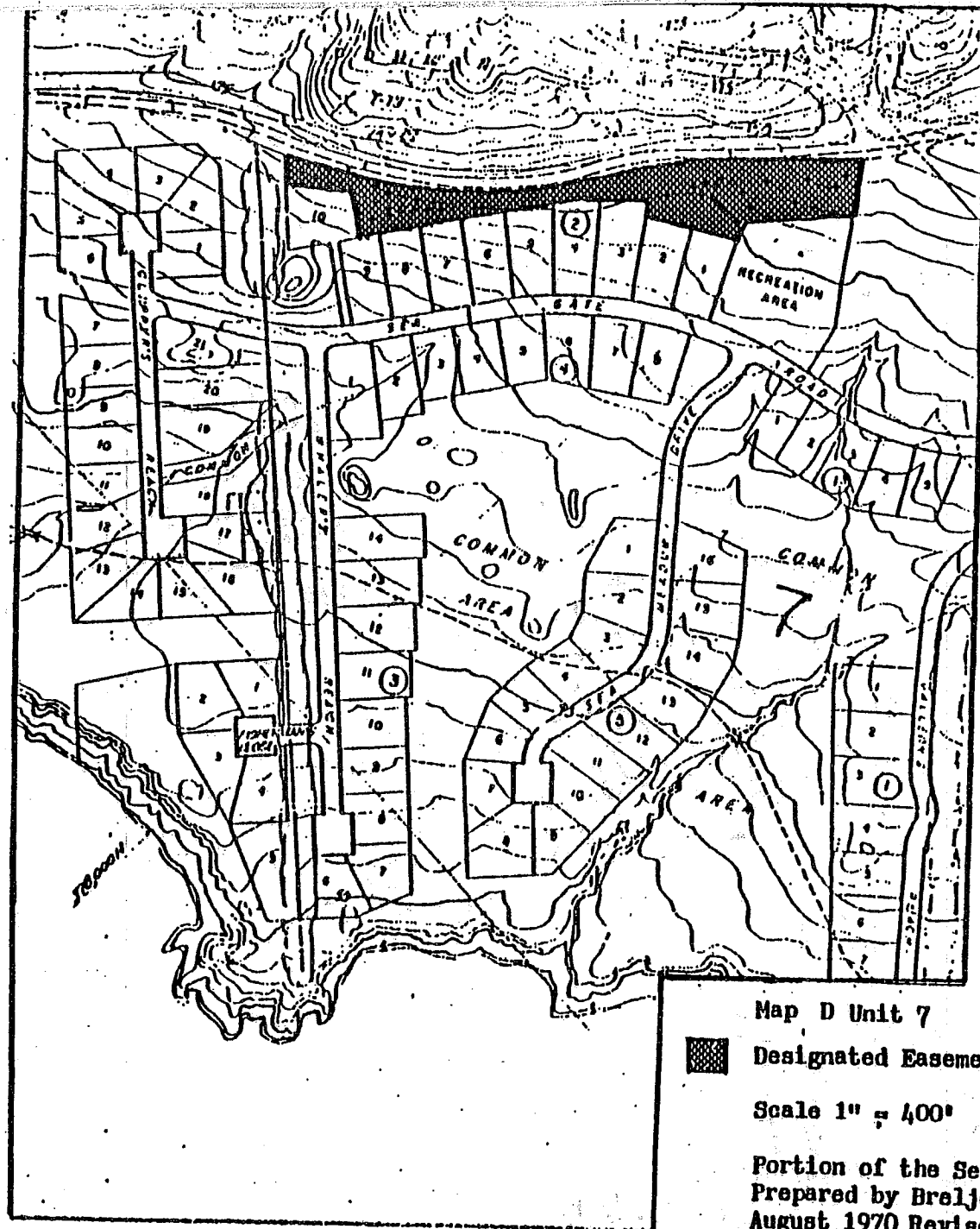
Map B Unit 11

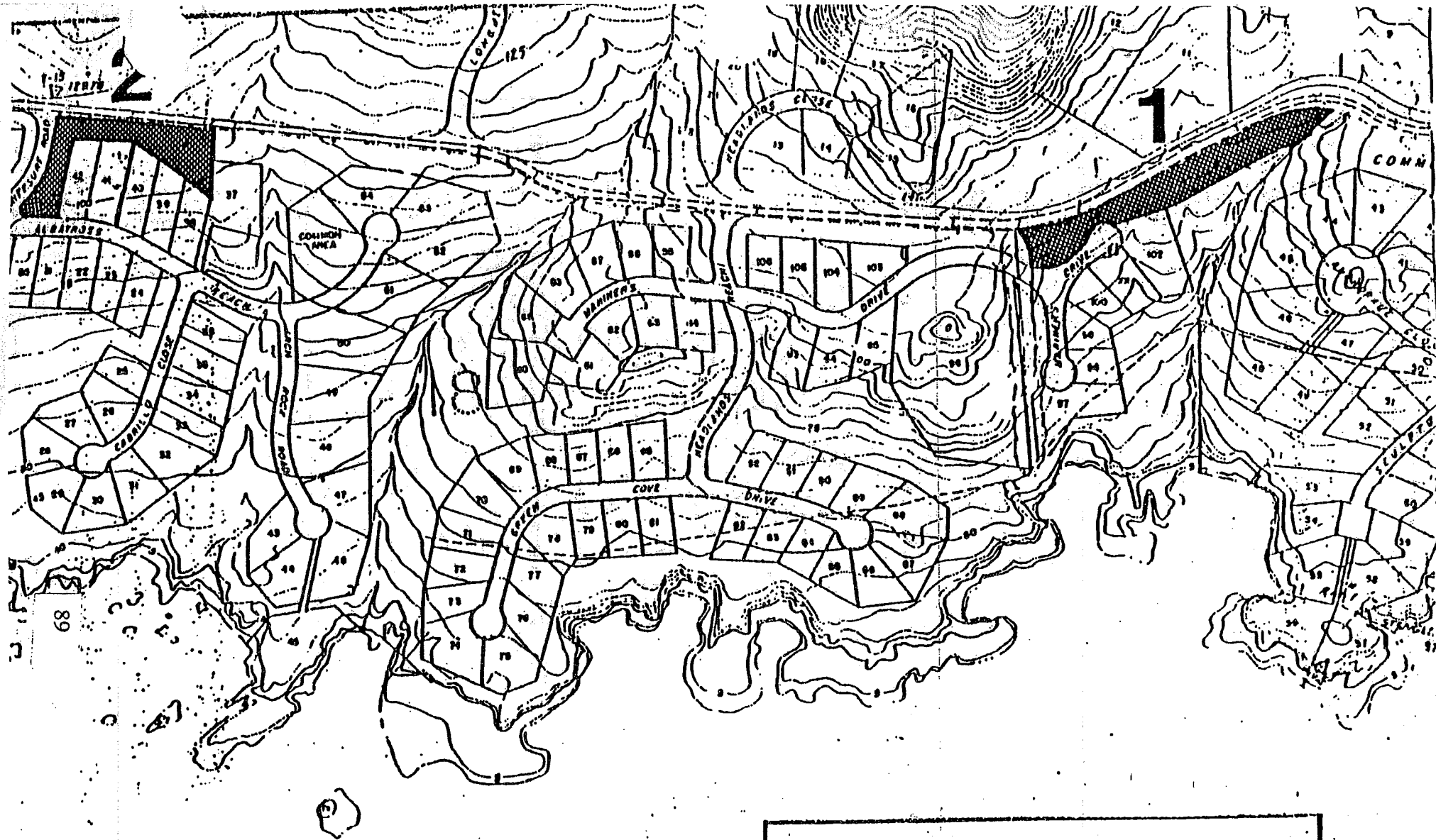
Designated Easement Area

Scale 1" = 400'

Portion of the Sea Ranch Composite Map
Prepared by Brelje and Race
August 1970 Revised August 1972



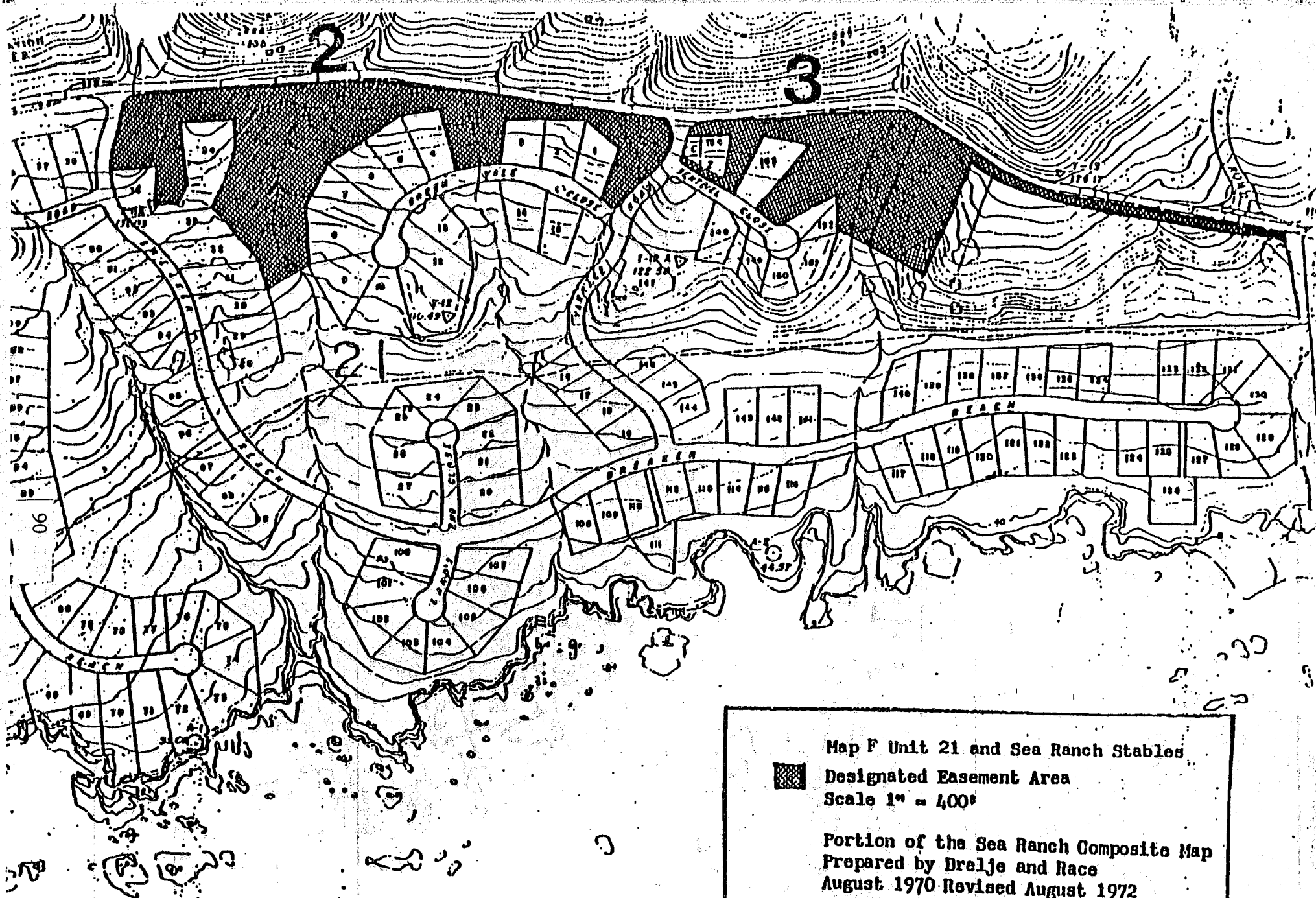


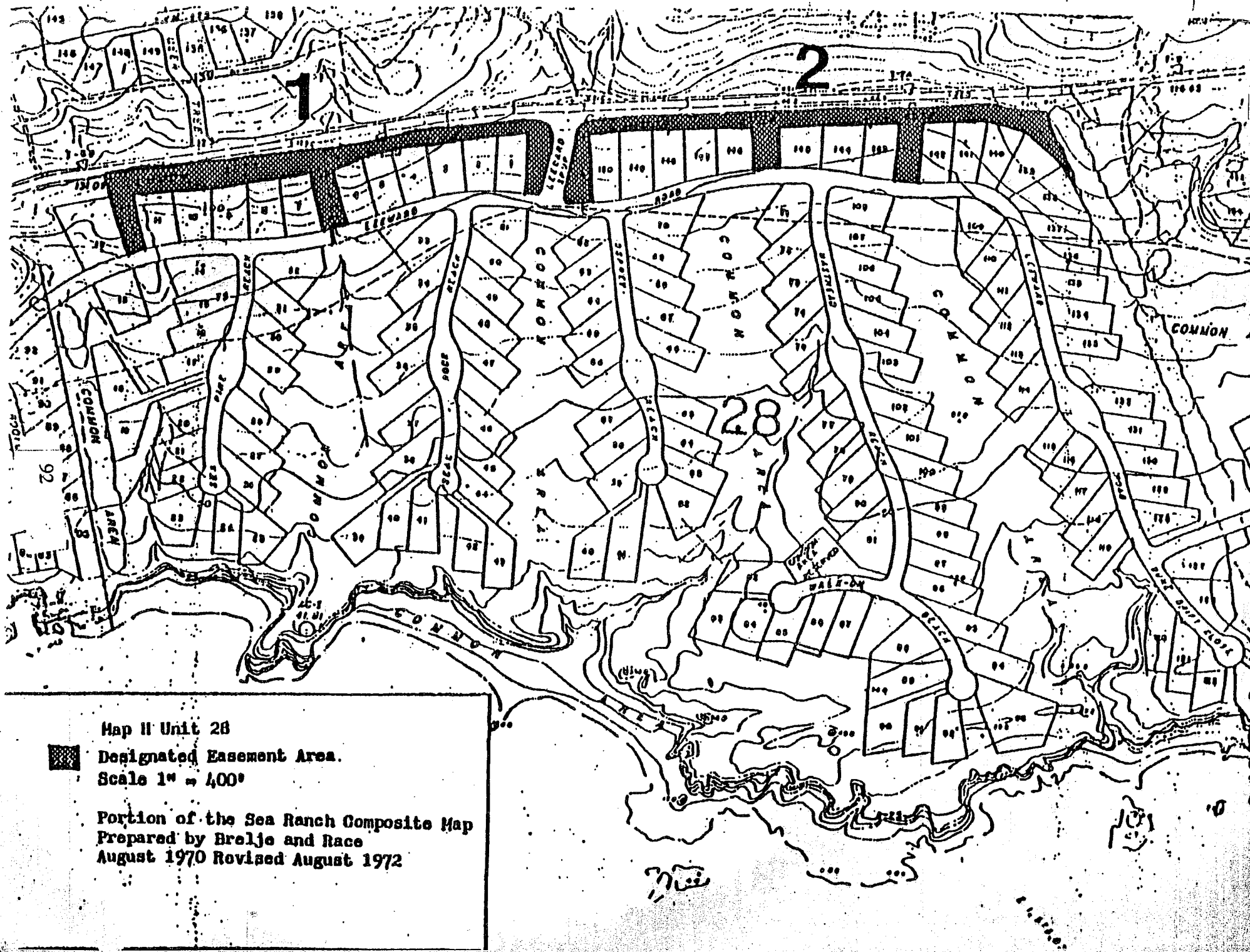


Map E Unit 18

Designated Easement Area
Scale 1" = 400'

Portion of the Sea Ranch Composite Map
Prepared by Brelje and Race
August 1970 Revised August 1972





Map II Unit 28

Designated Easement Area.

Scale 1" = 400'

Portion of the Sea Ranch Composite Map
Prepared by Brelje and Race
August 1970 Revised August 1972

PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

APPENDIX E: NATURAL RESOURCES September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX E: NATURAL RESOURCES

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APPENDIX E: NATURAL RESOURCES

1. RESTORATION AND MONITORING REQUIREMENTS

Restoration and Monitoring

A Restoration and Monitoring Plan shall be required for any project involving habitat mitigation or restoration consistent with **Policy C-OSRC-5a(7)**. The Restoration and Monitoring Plan shall consist of a stand-alone document that specifies performance standards, success criteria, adaptive management, and monitoring requirements as described below. Permit Sonoma County staff may request additional information to address site-specific conditions.

Restoration and Monitoring Plan. A Restoration and Monitoring Plan shall:

- (a) Be a stand-alone document that describes actual methods and practices to be employed, including performance/success criteria and adaptive management and monitoring requirements;
- (b) Provide complete information, avoiding generalizations and oversimplification of data and references;
- (c) Be able to be implemented by a technical specialist who has not been involved in the project;
- (d) Be written in such a way that an educated layman could understand and evaluate the plan;

Key Components. A Restoration and Monitoring Plan shall include, but not be limited to, the following key components:

- (a) A clear statement of the goals of the restoration for all habitat types;
- (b) Characterization of the desired habitat, including at least one actual sampled site, that can act as both a model (with clear rationale and criteria for comparison with the project site) for the restoration and as a reference site for developing success criteria;
- (c) Details about the sampling protocol used for the reference site and those methods that will be applied to the restoration site, along with a report and discussion of the data collected from the reference site;
- (d) A clear rationale for selecting the proposed restoration site, including specific characteristics that make it a strong candidate for a successful restoration project;
- (e) A detailed qualitative and quantitative description of the chosen restoration site prior to restoration, including existing biological resources and their conditions;

- (f) Specific performance criteria and the rationale for their selection, procedures for determining performance success, a formal sampling design including analytical methods, and a reporting schedule (interim and final);
- (g) Requirements for designation of a qualified restoration biologist as the Restoration Manager who will be personally responsible for all phases of the restoration;
- (h) Prohibition on assignment of different phases of the restoration to different contractors without onsite supervision by the Restoration Manager;
- (i) A detailed Grading Plan if the topography must be altered, including fill amounts and locations, and the locations of fill removal and disposal;
- (j) A specific Erosion Control Plan if soil or other substrate will be significantly disturbed during the course of the restoration;
- (k) A Weed Eradication Plan. The Plan should be designed to eradicate existing weeds and to control future invasion by exotic species, to be approved by and carried out or supervised by a restoration biologist;
- (l) A Planting Plan that specifies a detailed plant palette based on the natural habitat type and reference site(s) that is the model for the restoration, using local native and non-invasive stock, and requiring that if plants, cuttings, or seed are obtained from a nursery, the nursery must certify that they are of local origin and are not cultivars. The Planting Plan shall provide specifications for preparation of nursery stock and include technical details of planting methods (e.g., spacing, mycorrhizal inoculation, etc.);
- (m) An Irrigation Plan that describes the method and timing of watering, conserves water, and ensures removal of watering infrastructure by the end of the monitoring period. Where feasible, planting and seeding should be timed to take advantage of naturally-favorable conditions (e.g., prior to the onset of winter rains) to help reduce reliance on irrigation for establishment;
- (n) An Interim Monitoring Plan that includes maintenance and remediation activities, interim performance goals, assessment methods, and schedule. The Interim Monitoring Plan should serve as an adaptive management plan, guiding modifications to the restoration project based upon observed and measured performance, to maximize the success of the effort;
- (o) A Final Monitoring Plan to determine whether the restoration has been successful that specifies: the basis for selection of the performance criteria, types of performance criteria, procedure for judging success, formal sampling design, sample size, approval of a final report, and provision for possible further action.

2. BIOLOGICAL RESOURCE ASSESSMENT REQUIREMENTS

Biological Resources

A biological resource assessment shall be required for any project which could impact biological resources consistent with **Policy C-OSRC-5b(3)**. The biological resource assessment shall be performed by a qualified biologist and shall meet criteria described below. Permit Sonoma staff may require additional information to address site-specific conditions.

Permit Sonoma County staff may request additional information to address site-specific conditions.

Site Description. A description of the regional setting and physical characteristics of the site, including, topography (e.g. slope orientation, etc.), soil types, habitat and/or wildlife migration corridors, and microclimate.

Photographic Documentation. Photographic documentation of the existing condition of the proposed development site.

Sensitive Habitats. A list of sensitive habitats and species that could occur on the site, which can be generated from the California Natural Diversity Database, California Native Plant Society, and other reliable source(s).

Site Specific Assessment. A site-specific assessment, based upon the list of sensitive habitats and species with potential to occur on the site and at least one field visit for all parcels that are part of the proposed development. The assessment shall include a discussion of any species observations during the field visit, and whether other species are likely to be present during other times of the year, based upon habitat analysis and professional opinion. Constraints on the accuracy of the assessment (e.g., wrong season, time-of-day) should be explicitly discussed.

Trees for Sensitive Species. Identification of trees suitable for nesting or roosting or significant foraging habitat, and any evidence of sensitive bird species and raptor use.

Wetlands. Identification, assessment, and mapping of potential wetland areas in accordance with **Appendix E**, Section 4.

Field Visit. Details of the field visit, including date, time, weather, temperature, and methods employed. The field visit shall be completed in spring, unless a different

and/or additional time of year is recommended by the Sonoma County staff biologist based on the likelihood of finding particular sensitive habitats or species.

Habitat and Plant Community Types. Identification of and delineation within polygons all the habitat/plant community types (at the alliance level based on the classification methodology used in the *Manual of California Vegetation* (Sawyer et al. 2009 or subsequent editions) present on the property and generally indicate the locations of the plant communities on adjacent properties. The location of observed sensitive plant or animal species should also be shown on the map.

ESHA. Identification and delineation of the limits of potential ESHA on and immediately adjacent to the project site, based upon **Policies C-OSRC-5b(2)** through **C-OSRC-5b(5)**.

Pre and Post Project Conditions. A comparison of pre-project and post-project conditions, including identification of potential project impacts on ESHA and other biotic resources both on and off the project site, and a discussion of the duration, extent, and severity of the project's effects on the condition of the resource within its natural range locally. **(New)**

3. CRITERIA FOR ESTABLISHING BUFFER AREAS

A buffer area provides essential open space between the development and the environmentally sensitive habitat area. The existence of this open space ensures that the type and scale of development proposed will not significantly degrade the habitat area (as required by CA Coastal Act Section 30240). Therefore, development allowed in a buffer area is limited to access paths, fences necessary to protect the habitat area, and similar uses which have either beneficial effects or at least no significant adverse effects on the environmentally sensitive habitat area. A buffer area is not itself a part of the environmentally sensitive habitat area, but a "buffer" or "screen" that protects the habitat area from adverse environmental impacts caused by the development.

A buffer area should be established for each development adjacent to environmentally sensitive habitat areas based on the standards enumerated below. The width of a buffer area will vary depending upon the analysis. The buffer area should be a minimum of 100 feet for small projects on existing lots (such as one single family home or one commercial office building) unless the applicant can demonstrate that 100 feet is unnecessary to protect the resources of the habitat area. If the project involves substantial improvements or increased human impacts, such as a subdivision, a much wider buffer area should be required. For this reason, the guideline does not recommend a uniform width. The appropriate width will vary with the analysis based upon the standards. For a wetland, the buffer area should be measured from the landward edge of the wetland (Appendix D). For a stream or river, the buffer area should be measured landward from the landward edge of riparian vegetation or from the top edge of the bank (e.g., in channelized streams). Maps and supplemental information may be required to determine these boundaries. Standards for determining the appropriate width of the buffer area as follows:

1. Biological significance of adjacent lands. Lands adjacent to a wetland, stream, or riparian habitat area vary in the degree to which they are functionally related to these habitat areas. That is, functional relationships may exist if species associated with such areas spend a significant portion of their life cycle on adjacent lands. The degree of significance would depend upon the habitat requirements of the species in the habitat area (e.g., nesting, feeding, breeding or resting). This determination requires the expertise of an ecologist, wildlife biologist, ornithologist, or botanist who is familiar with the particular type of habitat involved. Where a significant functional relationship exists, the land supporting this relationship should also be considered to be part of the environmentally sensitive habitat area, and the buffer area should be measured from the edge of these lands and be sufficiently wide to protect these functional relationships. Where no significant functional relationships exist, the buffer should be extended

from the edge of the wetland, stream or riparian habitat (for example) which is adjacent to the proposed development (as opposed to the adjacent area which is significantly related ecologically).

2. Sensitivity of species to disturbance. The width of the buffer area should be based, in part, on the distance necessary to ensure that the most sensitive species of plants and animals will not be disturbed significantly by the permitted development. Such a determination should be based on the following:
 - a. Nesting, feeding, breeding, resting or other habitat requirements of both resident and migratory fish and wildlife species.
 - b. An assessment of the short-term and long-term adaptability of various species to human disturbance.
3. Susceptibility of parcel to erosion. The width of the buffer area should be based, in part, on an assessment of the slope, soils, impervious surface coverage, runoff characteristics, and vegetative cover of the parcel and to what degree the development will change the potential for erosion. A sufficient buffer to allow for the interception of any additional material eroded as a result of the proposed development should be provided.
4. Use of natural topographic features to located development. Hills and bluffs adjacent to environmentally sensitive habitat areas should be used, where feasible, to buffer habitat areas. Where otherwise permitted, development should be located on the sides of hills away from environmentally sensitive habitat areas. Similarly, bluff faces should not be developed, but should be included in the buffer area.
5. Use of existing cultural features to locate buffer zones. Cultural features, (e.g., roads and dikes) should be used, where feasible, to buffer habitat areas. Where feasible, development should be located on the side of roads, dikes, irrigation canals, flood control channels, etc., away from the environmentally sensitive habitat area.
6. Lot configuration and location of existing development. Where an existing subdivision or other development is largely built out and the buildings are a uniform distance from a habitat area, at least that same distance will be required as a buffer area for any new development permitted. However, if that distance is less than 100 feet, additional mitigation measures (e.g., planting of native vegetation which grows locally) should be provided to ensure additional protection. Where development is proposed in an area which is largely undeveloped, the widest and most protective buffer area feasible should be required.
7. Type and scale of development proposed. The type and scale of the proposed development will, to a large degree, determine the size of the buffer area necessary to protect the environmentally sensitive habitat area. For example, due

to domestic pets, human use and vandalism, residential developments may not be as compatible as light industrial developments adjacent to wetlands, and may therefore require wider buffer areas. However, such evaluations should be made on a case-by-case basis depending upon the resources involved, and the type and density of development on adjacent lands.

4. TECHNICAL CRITERIA FOR IDENTIFYING AND MAPPING WETLANDS AND OTHER WET ENVIRONMENTALLY SENSITIVE HABITAT AREAS

The purpose of this discussion is to provide guidance in the practical application of the definition of "wetland" contained in the California Coastal Act. The Coastal Act definition of "wetland" is set forth in Section 30121 of the Act which states:

Sec. 30121 "Wetland means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

This is the definition upon which the California Coastal Commission relies to identify "wetlands". The definition refers to lands "...which may be periodically or permanently covered with shallow water..." However, due to highly variable environmental conditions along the length of the California Coast, wetlands may include a variety of different types of habitat areas. For this reason, some wetlands may not be readily identifiable by simple means. In such cases, the Commission will also rely on the presence of hydrophytes and/or the presence of hydric soils. The rationale for this in general is that wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. For this reason, the single features that most wetlands share is soil or substrata that is at least periodically saturated with or covered by water, and this is the feature used to describe wetlands in the Coastal Act. The water creates severe physiological problems for all plants and animals except those that are adapted for life in water or in saturated soil, and therefore only plants adapted to these wet conditions (hydrophytes) could thrive in these wet (hydric) soils. Thus, the presence or absence of hydrophytes and hydric soils make excellent physical parameters upon which to judge the existence of wetland habitat areas for the purposes of the Coastal Act, but they are not the sole criteria. In some cases, proper identification of wetlands will require the skills of a qualified professional.

The United States Fish and Wildlife Service has officially adopted a wetland classification system¹ which defines and classifies wetland habitats in these terms. Contained in the classification system are specific biological criteria for identifying wetlands and establishing their upland limits. Since the wetland definition used in the classification

¹ "Classification of Wetlands and Deep-Water Habitats of the United States." By Lewis M. Cowardin, et al, United States Department of the interior, Fish and Wildlife Service, December 1979.

system is based upon a feature identical to that contained in the Coastal Act definitions, i.e., soil or substrata that is at least periodically saturated or covered by water, the Commission will use the classification system as a guide in wetland identification. Applying the same set of biological criteria consistently should help avoid confusion and assure certainty in the regulatory process. This appendix discusses the adaption of this classification system to the Coastal Act definition of "wetland" and other terms used in the Act, and will form the basis of the Commission's review of proposals to dike, fill or dredge wetlands, estuaries or other wet habitat areas.

4.1 U.S. Fish and Wildlife Classification System: Upland, Wetland/Deep-water Habitat Distinction

The United States Fish and Wildlife Service classification is hierarchical, progressing from systems and subsystems, at the most general levels, to classes, subclasses, and dominance types. The term "system" refers here to a complex of wetland and deep-water habitats that share the influence of one or more dominant hydrologic, geomorphic, chemical, or biological factors.

The Service provides general definitions of wetland and deep-water habitat and designates the boundary between wetland and deep-water habitat and the upland limit of a wetland. The following are the Services' definitions of wetland and deep-water habitats:

A. Wetlands

"Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrata is predominantly undrained hydric soil; and (3) the substrata is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.

Wetlands as defined here include lands that are identified under other categories in some land use classifications. For example, wetlands and farm lands are not necessarily exclusive. Many areas that we define as wetlands are farmed during dry periods, but if they are not tilled or planted to crops, a practice that destroys the natural vegetation, they will support hydrophytes.²

² For the purpose of identifying wetlands using the technical criteria contained in this guideline, one limited exception will be made. That is, drainage ditches as defined herein will not be considered wetlands under the Coastal Act. A drainage ditch shall be defined as a narrow (usually less than 5-feet wide), manmade, non-tidal ditch excavated from dry land.

Drained hydric soils that are now incapable of supporting hydrophytes because of a change in water regime are not considered wetlands by our definition. These drained hydric soils furnish a valuable record of historic wetlands, as well as an indication of areas that may be suitable for restoration.

The upland limit or wetland is designated as (1) the boundary between land with predominantly hydrophytic cover; (2) the boundary between soil that is predominantly hydric and soil that is predominantly non-hydric; or (3) in the case of wetlands without vegetation or soil, the boundary between land that is flooded or saturated at some time each year and land that is not. Wetlands should be identified and mapped only after a site survey by a qualified botanist, ecologist, or a soil scientist (See section III. 3. or the guideline for a list of required information).³

B. Deep water Habitats

"Deep water habitats are permanently flooded lands lying below the Deep water boundary of wetlands. Deep water habitats include environments where surface water is permanent and often deep, so that water, rather than air, is the principal medium within which the dominant organisms live, whether or not they are attached to the substrata. As in wetlands, the dominant plants are hydrophytes; however, the substrata are considered non-soil because the water is too deep to support emergent vegetation (U.S. Conservation Service, Soil Survey Staff, 1975).

"The boundary between wetland and deep-water habitat in the Marine and Estuarine Systems (i.e., areas subject to tidal influence) coincides with the elevation of the extreme low-water of spring tide (ELIS); permanently flooded areas are considered deep-water habitats in these systems. The boundary between wetland and deep-water habitat in the Riverine, Lacustrine and Palustrine System lies at a depth of 2 meters (6.6 ft.) below low water; however, if emergents, shrubs or trees grow beyond this depth at any time, their deep-water edge is the boundary."

4.2 Wetland/Estuary/Open Coastal Water Distinction

For the purposes of mapping "wetlands" under the Coastal Act's definition of wetlands, and of mapping the other wet environmentally sensitive habitat areas referred to in the Act, including "estuaries", "streams", "riparian habitats", "lakes", and "open coastal water", certain adaptations of this classification system will be made. The following is a discussion of these adaptations.

³ Further details regarding the standards and criteria for mapping wetlands using the Service's classification system may be found in the following, "Mapping Conventions of the National Wetland Inventory", (undated), published by the U.S.F.W.S. The document may be obtained from the U.S.F.W.S., Regional Coordinator, Region 1, Portland, Oregon.

"Wetland as defined in Section 30121 of the Coastal Act, refers to land covered by "shallow water", and the examples given in this section include fresh, salt and brackish water marshes, mudflats and fens. A distinction between "wetland" and the other habitat areas in the Act, for example, "estuary", must be made because the Coastal Act's policies apply differently to these areas, and because the Coastal Act does not define some of these terms (such as "estuary"). A reasonable distinction can be made between "wetland" and "estuary" on the basis of an interpretation of the phrase "shallow water". Using the Service's classification system, "shallow water" would be water that is above the boundary of deep-water habitat, which would be the line of extreme low-water of spring tide⁴ for areas subject to tidal influence and 2 meters for non-tidal areas. Therefore, wetland begins at extreme low-water of spring tide and "estuary" or "open coastal water" is anything deeper. The Coastal Act definition of "wetlands" would include the wetland areas of Estuaries, Palustrine, and Lacustrine ecological systems defined by the Fish and Wildlife classification system.

For the purposes of the Coastal Act, an "estuary" is a coastal water body usually semi-enclosed by land, but which has open, partially obstructed, or intermittent exchange with the open ocean and in which ocean water is at least occasionally diluted by fresh water runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation.

"Open coastal water" or "coastal water" as used in the Coastal Act refers to the open ocean overlying the continental shelf and its associated coastline with extensive wave action. Salinities exceed 30 parts per thousand with little or no dilution except opposite mouths of estuaries.

⁴ While the Service's classification system uses "extreme low-water of spring tide" as the datum to distinguish between "shallow-water" and "deep-water habitat", such datum is not readily available for the California coast. Therefore, the lowest historic tide recorded on the nearest available tidal bench mark established by the U.S. National Ocean Survey should be used as the datum.

Data for such bench marks are published separately for each station in loose-leaf form by the National Ocean Survey, Tideland Water Levels, Datum and Information Branch, (C23), Riverdale, MD 20840. These compilations include the description of all bench marks at each tide station (for ready identification on the ground), and their elevations above the basic hydrographic or chart datum for the area, which is mean lower low-water on the Pacific coast. The date and length of the tidal series on which the bench mark elevations are based are also given.

4.3 Wetland/Riparian Area Distinction

For the purpose of interpreting Coastal Act policies, another important distinction is between "wetland" and "riparian habitat". While the Service's classification system includes riparian areas as a kind of wetland, the intent of the Coastal Act was to distinguish these two areas. "Riparian habitat" in the Coastal Act refers to riparian vegetation and the animal species that require or utilize these plants. The geographic extent of a riparian habitat would be the extent of the riparian vegetation. As used in the Coastal Act, "riparian habitat" would include the "wetland" areas associated with Palustrine ecological systems as defined by the Fish and Wildlife Service classification system.

Unfortunately, a complete and universally acceptable definition of riparian vegetation has not yet been developed, so determining the geographic extent of such vegetation is rather difficult. The special case of determining consistent boundaries of riparian vegetation along watercourses throughout California is particularly difficult. In Southern California, these boundaries are usually obvious; the riparian vegetation grows immediately adjacent to watercourses and only extends a short distance away from the watercourse. In Northern California, however, the boundaries are much less distinct; vegetation that occurs alongside a stream may also be found on hillsides and far away from a watercourse.

For the purposes of this guideline, riparian vegetation is defined as that association of plant species which grows adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and other freshwater bodies. Riparian plant species and wetland plant species either require or tolerate a higher level of soil moisture than dryer upland vegetation, and are therefore considered hydrophytic. However, riparian vegetation may be distinguished from wetland vegetation by the different kinds of plant species. At the end of this appendix, lists are provided of some wetland hydrophytes and riparian hydrophytes. These lists are partial, but give a general indication of the representative plant species in these habitat areas and should be sufficient to generally distinguish between the two types of plant communities.

The upland limit of a riparian habitat, as with the upland limit of vegetated wetlands, is determined by the extent of vegetative cover. The upland limit of riparian habitat is where riparian hydrophytes are no longer predominant.

As with wetland, riparian habitats should be identified and mapped only after a site survey by a qualified botanist, freshwater ecologist, or soil scientist.⁵ (See pp. 6-9 of the guideline for a list of information which may be required of the applicant.)

4.4 Vernal Pools

Senate Bill No. 1699 (Wilson) was approved by the Governor on September 13, 1980 and the Bill added Section 30607.5 to the Public Resources Code to read:

30607.5: Within the City of San Diego, the commission shall not impose or adopt any requirements in conflict with the provisions of the plan for the protection of vernal pools approved and adopted by the City of San Diego on June 17, 1980, following consultation with state and federal agencies, and approved and adopted by the United States Fish and Wildlife Service.

The Commission shall adhere to Section 30607.5 of the Public Resources Code in all permit and planning matters involving vernal pools within the City of San Diego.

All vernal pools located within the City of San Diego in the coastal zone are depicted on a map attached as Exhibit 1 to a letter from Commission staff to Mr. James Gleason, City of San Diego (4/29/30). While "vernal pool" is a poorly defined regional term, all information available to the Commission suggests that all vernal pools are distinct from vernal ponds and vernal lakes, which exist in other parts of the coastal zone (e.g., Oso Flaco Lakes in San Luis Obispo County). The Commission generally considers these habitat areas to be wetlands for the purposes of the Coastal Act, and therefore all applicable sections of the Coastal Act will be applied to these areas.

4.5 Representative Plant Species in Wetlands and Riparian Habitat Areas

This is a list of "representative" species that can be expected to be found in the various habitat areas indicated. Not all of them will be found in all areas of the State, and there are numerous others that could be included. However, this test should suffice to generally distinguish between these types of plant communities.

⁵ Identification of riparian habitat areas in Northern California presents peculiar difficulties. While Southern California riparian vegetation generally occurs in a narrow band along streams and rivers, along the major rivers in Northern California it may be found in broad floodplains, abandoned river channels and the bottoms adjacent to the channels. In forested areas, the overstory of riparian vegetation may remain similar to the adjacent forest but the understory may contain a variety of plant species adapted to moist or wet substrates. For example, a salmonberry, bayberry, willow, twinberry, and lady fern, may all be more common in the understory of riparian habitat areas than in other types of forest habitats.

A. Salt Marsh

Pickleweed (*Salicornia virginica*)
Glasswort (*S. subterminales*)
Saltgrass (*Distichlis spicata*)
Cordgrass (*Spartina foliosa*)
Jaumea (*Jaumea carnosa*)
Saltwort (*Batis maritima*)
Alkali heath (*Frankenia grandifolia*)
Salt cedar (*Monanthocalce littoralis*)
Arrow grass (*Trizicnion maritimum*)
Sea-bliza (*Suaeda californica* var *pubescens*)
Marsh rosemary (*Limonium californicum* var *mexicanum*)
Gum plant (*Grindelia stricta*)
Salt Marsh fleabane (*Plucnea purpurescens*)

B. Freshwater Marsh

Cattails (*Typha* spp.)
Bulrushes (*Scirpus* spp.)
Sedges (*Carex* spp.)
Rushes (*Juncus* spp.)
Spikerush (*Heleochois palustris*)
Pondweeds (*Potamogeton* spp.)
Smartweeds (*Polygonum* spp.)
Water Lilies (*Nuphar* spp.)
Buttercup (*Ranunculus aquatilis*)
Water-cress (*Nasturium officinale*)
Bur-reed (*Sparganium eurycarpum*)
Water parsley (*Venanthe sarmentosa*)
Naiads (Na)

C. Brackish Marsh

Alkali bulrush (*Scirpus robustus*)
Rush (*Juncus balnicus*)
Brass buttons (*Cotula coronopifolia*)
Fat-hen (*Atriplex patula* var *hastata*)
Olney's bulrush (*Scirpus olneyi*)
Common tula (*Scirpus acutus*)
Common reed (*Phragmites communis*)

D. Riparian

Willows (*Salix* spp.)
Cottonwoods (*Populus* spp.)
Red alder (*Alnus rubra*)

Box alder (*Acer negundo*)
Sycamore (*Platanus racemosa*)
Blackberry (*Rubus vitifolia*)
So. Black W alnut (*Juglans californica*) (So. Calif.)
California Bay (*Umbellularia californicum*) (So. Calif.)
Bracken fern (*Pteris aquilinum*) (Cen. Calif.)
Current (*Ribes* spp.)
Twinberry (*Lonicera involucrata*) (No. Calif.)
Lady fern (*Athyrium filix-femina*)
Salmonberry (No. Calif.)
Bayberry (No. Calif.)

E. Vernal Pools

Downingia (*Downingia* sp.)
Meadow-foxtail (*Alopecurus howellii*)
Hair Grass (*Deschampsia danthonioides*)
Quilwort (*Isoetes* sp.)
Meadow-foam (*Limnanthus* sp.)
Pogogyne (*Pogogyne* sp.)
Flowering Quilwort (*Lilaea scilloides*)
Cryptantha (*Cryptantha* sp.)
Loosestrife (*Lythrum hyssopifolium*)
Skunkweed (*Navarretia* sp.)
Burton-celery (*Eryngium* sp.)
Crouse-grass (*Orcuttia* sp.)
Water-starwort (*Callitriche* sp.)
Waterwort (*Elatine* sp.)
Woolly-heads (*Psilocarpus* sp.)
Brodiaea (*Brodiaea* sp.)
Tilaea (*Crassula aquatica*)

5. HABITAT PROTECTION GUIDELINES

5.1 Streamside Conservation Area or Riparian Corridor

Allowable uses and development within any streamside conservation area or Riparian Corridor shall be limited to uses and methods described below consistent with **Policy C-OSRC-5c(2)**.

Timber Harvest. Timber harvest operations conducted in accordance with an approved timber harvest plan.

Vegetation Removal. Vegetation removal, including as part of an integrated pest management program administered by the Sonoma County Agricultural Commissioner, necessary for continued viability of the riparian habitat.

Streamside Maintenance and Restoration. Streamside maintenance and restoration necessary for continued viability of the riparian habitat.

Fire Fuel Management. Fire fuel management where vegetation removal is limited to the minimum required for fire safety.

Habitat Alteration. Filling, grading, or dredging necessary for continued viability of the riparian habitat.

Public Recreation Facilities. Parks, public access, trails, bikeways, and other public recreational facilities dependent on the riparian resources where it can be shown there would be no long-term impacts on the viability of the riparian habitat from construction, maintenance, and public use of the facilities.

Stream and River Alteration. Limited alterations of rivers and streams, as provided in **Policy C-OSRC-5c(8)**.

Agricultural Activities. The following agricultural activities, provided that they are conducted and maintained in compliance with agricultural best management practices developed or referenced by the Agricultural Commissioner, or defined in a farm or ranch water quality plan acceptable to the Agricultural Commissioner. The Agricultural Commissioner shall determine the applicable agricultural best management practices and shall enforce the provisions of this subsection.

- (a) Grazing and similar agricultural activities not involving structures or agricultural cultivation, except as defined by (9) below, and conducted in accordance with water quality protection guidelines of the Sonoma County Agricultural

Commissioner, Resource Conservation Districts, or Regional Water Quality Control Boards.

- (b) Agricultural cultivation and related planting, seeding, fertilizing, weeding, irrigation, and harvesting, not including application of pesticides and herbicides, located less than 100 feet from the edge of the riparian canopy.

Development. Grading, road crossings, and utility line crossings only under one or both of the following conditions:

- (a) It can be clearly demonstrated to Permit Sonoma Planning staff through having substantial functions or values as riparian habitat; and the proposed development would not have a significant, adverse impact on the functions and values of adjacent riparian habitat.
- (b) A conservation plan is approved by County Permit Sonoma Planning staff that provides for the appropriate protection of biotic resources, water quality, flood management, bank stability, groundwater recharge, and other functions of riparian habitat.

Until the County adopts mitigation standards and procedures for specific land uses and riparian functions, prior to approval of the conservation plan, the Permit Sonoma staff shall consult with the California Department of Fish and Wildlife, appropriate Resource Conservation District, Sonoma County Agricultural Commissioner, and other pertinent resource agencies regarding adequacy of the conservation plan.

5.2 Diking, Filling, Draining, and Dredging of Coastal Waters, Wetlands, and Estuaries

Diking, filling, draining, and dredging of coastal waters, wetlands, and estuaries shall be permitted only in accordance with other applicable provisions of this Local Coastal Program, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to uses and methods described below consistent with **Policies C-OSRC-5d(5) and C-OSRC-5e(4)**.

- (a) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
- (b) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
- (c) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings

for public recreational piers that provide public access and recreational opportunities.

- (d) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- (e) Mineral extraction, including sand for restoring beaches, except in ESHA.
- (f) Maintenance, restoration, and enhancement of wetland function.
- (g) Nature study, aquaculture, or similar resource dependent activities.

Allowable diking, filling, draining, and dredging activities shall meet the following conditions:

- (a) Located outside of wildlife breeding habitat;
- (b) Limited to the smallest area feasible;
- (c) Utilize measures to protect water quality and remove them as soon as possible after they have served their purpose;
- (d) Result in no net loss in area and value of wetlands.

5.3 Mitigations Criteria

Where wetlands fill or development impacts are permitted in conformity with the Coastal Act and any applicable Local Coastal Plan policies, require mitigation measures to compensate for the temporal and functional loss of affected wetlands and associated habitat and shall be limited to uses and methods described below consistent with **Policy C-OSRC-5d(8)**.

Net Loss in Wetlands. No net losses shall occur in wetland acreage, functions, or values. This includes both direct impacts on wetlands and essential buffers, and consideration of potential indirect effects of development due to changes in available surface water and nonpoint source water quality degradation. Detailed review of the adequacy of a proposed mitigation plan shall be performed as part of any environmental and permit review of the proposed development project to allow for a thorough evaluation of the anticipated loss, as well as the replacement acreage, functions, and values.

Restoration in Wetlands. Restoration of degraded wetlands is generally preferred to creation of new replacement wetlands, due to the greater likelihood of success in terms of ecological function.

Mitigation Implementation. Mitigation shall be implemented prior to and/or concurrently with the project activity causing the potential adverse impact to minimize any short-term loss and modification to wetlands.

Wetland Buffer. An area of adjacent upland habitat shall be protected to provide an adequate buffer for wetland functions and values. Development shall be set back the minimum distance required under **Policy C-OSRC-5e(4)** to create this buffer.

Mitigation Sites. Mitigation sites shall be permanently protected and managed for open space and wildlife habitat purposes.

Mitigation Projects. Mitigation projects must to the extent feasible minimize the need for ongoing maintenance and operational manipulation (e.g., dredging, artificial water-level controls, etc.) to ensure long-term success. Self-sustaining projects with minimal maintenance requirements constitute the primary objective and are encouraged.

Adverse Impacts on Wetlands. All plans to minimize or mitigate adverse impacts to wetland habitats shall include provisions to monitor the success of the restoration project for at least 5 years. The measures taken to avoid adverse impacts may be modified, but not weakened, if the original plans prove unsuccessful. Performance bonds or other evidence of financial responsibility shall be required for all mitigation plans involving habitat creation or enhancement, including the cost of monitoring for at least five years post-completion, or as long as necessary to ensure success criteria are achieved.

Restored Wetland Target. Mitigation shall be commensurate with adverse impacts of the wetland alteration and consist of providing similar values and greater wetland acreage than those of the wetland area adversely affected. All restored or created wetlands shall have the same or increased habitat values as the wetland proposed to be impacted.

Such mitigation measures may not be required for temporary or short-term fill or diking; provided that a bond or other evidence of financial responsibility is provided to assure that restoration will be accomplished in the shortest period of time, not to exceed 12 months.

6. ADMINISTRATIVE WAIVER OF WETLAND (100 FOOT SETBACKS) REQUIREMENTS IN THE LOCAL COASTAL PLAN IN "RURAL COMMUNITIES" AND "URBAN SERVICE AREAS" ONLY, WHERE ROADS, TOPOGRAPHY, OTHER DEVELOPMENT EXISTS BETWEEN PROPERTY DEVELOPMENT AREA AND WETLAND

In enforcing the 100 foot setbacks from wetlands and 300-foot environmental requirement near wetlands in urban areas, the Director of the Permit and Resource Management Department may, through aerial photos, topographical maps, or other means make a determination, subject to review and approval by the Executive Director of the Coastal Commission, that development will not affect the riparian area or wetland because:

- a. Other developed lots or roads exist between the proposed development and the wetland. This standard shall be used cautiously - at the outer edge of the 300-foot limit. If there is any reasonable doubt the proposal would affect the wetlands or riparian area, an environment assessment shall be undertaken and include appropriate mitigation measures.
- b. Topography is such that it is highly unlikely that development could affect the wetland.

The policies shall not be waived outside designated "rural community" and "urban service areas" on the Coastal Plan Land Use Map.

7. REVISION OF MAPPED ENVIRONMENTALLY SENSITIVE HABITAT AREAS

If there is no obvious mapping error which can be determined from review of aerial photos, the burden of proof is on the applicant to redefine the boundaries of a mapped environmentally sensitive habitat area.

To define wetlands, the applicant shall use the California Coastal Commission Criteria for identifying and mapping wetlands and other wet environmentally sensitive habitat areas. (See Appendix E, Section 4) The California Coastal Act defines wetlands as "lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

Riparian areas refer only to riparian vegetation. The geographical extent of a riparian habitat would be where riparian vegetation comprises at least 50% of the ground (shade) cover. Other habitats may be defined from Coastal Plan definitions.

Small drainage ways, usually less than five feet wide, with no evidence of riparian vegetation, are not to be considered riparian corridors. Unless there is a pooled or marshy area, they are probably also not wetlands as defined by the guidelines.

Where, during the course of review of a project, Coastal staff discovers an unmapped environmentally sensitive habitat area, staff shall utilize Coastal Plan habitat definitions and coastal Commission guidelines (for wet environmentally sensitive habitat areas), to define such area. Applicable Coastal Program restrictions would then apply.

Official changes in Open Space Maps may occur when Local Coastal Plan amendments are considered.

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PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

APPENDIX F: SHORELINE PROTECTION STRUCTURES GUIDELINES September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX F: SHORELINE PROTECTION STRUCTURE GUIDELINES

The construction, reconstruction, expansion, alteration, and/or replacement of a shoreline protective device, including seawalls, revetments, breakwaters, groins, bluff retention devices, deep piers/caissons and other shoreline protection structures for coastal erosion control and hazards protection shall be allowed only if all of the following criteria of the California Coastal Commission and County of Sonoma are met:

- (1) The structure would serve or protect only an existing (i.e., in existence prior to the Coastal Act on January 1, 1977) principally permitted use, public road, or public beach.
- (2) The siting and design of the proposed structure takes into account projected future changes in sea level based on the most up-to-date science and agency guidance.
- (3) The design of the proposed structure would not significantly alter the natural landform on which it is placed, and would not impact local sand supply.
- (4) The proposed structure would not have any of the following environmental effects:
 - a. Impede lateral beach access.
 - b. Reduce public access to the coastal environment.
 - c. Significant impacts on cultural and paleontological resources.
 - d. Significant impacts on wetlands, marine habitats and other significant resources or habitat areas.
 - e. Adversely affect adjacent or other sections of the shoreline.
 - f. Create a hazard in the area in which it is built.
- (5) A certified engineering geologist report is prepared which:
 - a. Demonstrates that the primary structure is in imminent risk from coastal erosion.
 - b. Contains at a minimum an alternatives analysis which includes the alternatives of: 1) no action; 2) relocating or demolishing the primary structure subject to the hazards; 3) removal of the portion of the development that is subject to the hazard; or 4) other non-structural alternatives such as sand replenishment or managed retreat; and concludes that a non-structural alternative is not feasible and that the device is the least environmentally damaging feasible alternative.

- c. Provides evidence that the proposed protection structure is designed and can be constructed and maintained to withstand the specific range of coastal conditions which can be expected to occur, including sea level rise.
 - d. Includes measures which ensure that the protection structure can and will be maintained through its design life.
- (6) A deed restriction or other legally binding document is recorded on the property which requires the following:
 - a. Owner is to be responsible, including financially, for monitoring and maintaining the shoreline protection structure.
 - b. Owner is to be responsible, including financially, for removing the shoreline protection structure if it fails or has an adverse effect on other properties which cannot be mitigated; the use it protects is abandoned; or the County, State Lands Commission, or Coastal Commission determines the structure should be removed.
- (7) The owner posts a cash bond with the County in an amount equal to the total cost plus inflation of removing the shoreline protection structure to guarantee that the money is available for that purpose.
- (8) The shoreline protective device shall be regularly monitored by an engineer or engineering geologist familiar and experienced with coastal structures and processes. Monitoring reports to the County and the Coastal Commission shall be required every five years from the date of coastal permit issuance until the coastal permit expiration, which shall evaluate whether or not the shoreline protective device is still required to protect the existing structure it was designed to protect.
- (9) Shoreline protective devices shall be required to mitigate impacts to shoreline sand supply, public access and recreation, and any other relevant coastal resource impacts in 20-year increments, starting with the building permit completion certification date. Permittees shall apply for a coastal permit amendment prior to expiration of each 20-year mitigation period, proposing mitigation for coastal resource impacts associated with retention of the shoreline protective device beyond the preceding 20-year mitigation period, and such application shall include consideration of alternative feasible mitigation measures in which the permittee can modify the shoreline protective device to lessen its impacts on coastal resources.

PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

APPENDIX G: BODEGA BAY FOCUSED VULNERABILITY ASSESSMENT AND ADAPTATION STRATEGIES September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

County of Sonoma

Bodega Bay Focused Sea Level Rise Vulnerability Assessment and Adaptation Strategies



April 30, 2017

Funded by:
California Ocean Protection Council

Prepared by:
Sonoma County Permit and Resource Management Department
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Executive Summary

This Sonoma County Coast Focused Vulnerability Assessment has been prepared under the County's California Ocean Protection Council Sea Level Rise Adaptation Planning Grant. It focuses on Bodega Bay, the coastal community most at risk from the impacts of sea level rise based on the results of the Sonoma County Coast *General Vulnerability Assessment*.

This Vulnerability Assessment: (1) identifies the coastal areas and assets in Bodega Bay exposed to sea level rise and storm events; (2) analyzes the location and extent of assets projected to be inundated by sea level rise and flooded by storm events; (3) assesses the impacts of inundation and flooding; and (4) identifies potential adaptation measures to minimize the risks and impacts of inundation and flooding.

Sea levels are expected to rise over 6 feet by the end of this century. The sea level rise and storm scenarios used in the analysis are based on: (1) the range of sea level rise projections for California adopted by the National Research Council in 2012; and (2) the Our Coast Our Future website and tool that uses the U.S. Geological Survey's Digital Elevation Model and Coastal Storm Modeling System. The model incorporates several factors that can be analyzed individually and collectively under various scenarios, including: sea level rise, tides, storm surge, El Niño effects, wave set up, and wave run up. Sonoma County selected five sea level rise and storm scenarios that cover a full range of impact to affected coastal communities by the end of the century.

The northern section of Bodega Bay is referred to as the Bodega Harbor Area. It contains all of the marinas, the only rural residential development, and the largest area of urban residential development in the Bodega Bay study area. By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 59% to 99% of marinas; 28% to 76% of County roads; 53% of a coastal wetland, and less than 1% to 14% of residential areas.

The eastern section of Bodega Bay is referred to as the Highway 1 Area. It contains all of the commercial development and the only public utility (Bodega Bay PUD Wastewater Treatment Plant) in the Bodega Bay study area. By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 9% to 70% of commercial areas, 51% of the Bodega Harbour Yacht Club, 13% to 22% of residential areas, and 2% of a public access and recreation area (Dredge Spoil Disposal Ponds Site).

The southern section of Bodega Bay is referred to as the County Regional Parks Area. It contains the only County parks (Westside and Doran Beach Regional Parks) and institutional development (U.C. Davis Bodega Marine Laboratory) in the Bodega Bay study area. By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 20% to 73% of coastal wetlands, almost 100% of Westside Regional Park and 36% of Doran Beach Regional Park, 26% to 39% of County roads, 23% of the Links at Bodega Harbor Golf Course, and less than 1% of the U.C. Davis Bodega Marine Laboratory.

1. Introduction

Sea Level Rise Adaptation Planning Grant

The June 2016, *General Sea Level Rise Vulnerability Assessment for the Sonoma County Coast* prepared by staff evaluated coastal areas, communities, land uses, development, public infrastructure, and habitats most vulnerable to sea level rise impacts. This General Vulnerability Assessment also identified Bodega Bay and Jenner as the communities most at risk from the impacts of sea level rise. Permit Sonoma chose Bodega Bay as the first community for a Focused Vulnerability Assessment. This Focused Vulnerability Assessment for Bodega Bay is based on the process outlined in the California Coastal Commission's Sea Level Rise Policy Guidance, and incorporates the results of the *Focused Vulnerability Assessment: Sonoma County* (July 29, 2016) by the Center for Ocean Solutions (COS). **Figure 1** shows the Bodega Bay Study Area.

Local Coastal Plan Update

The California Coastal Commission recently adopted policy guidance on assessing and addressing sea level rise risks in local communities. While only advisory, the guidance includes steps for analyzing sea level rise in Local Coastal Plans, including choosing a range of sea level rise projections, identifying potential impacts, and assessing risks coastal habitats and development. With this analysis, the guidance provides example adaptation measures and Local Coastal Plan policy options to use when drafting updated or new Local Coastal Plan policies for certification with the Coastal Commission. The guidance further provides steps to implementing the policy in an updated Local Coastal Plan, monitoring, and amending the Local Coastal Plan as scientific and engineering fields advance our knowledge of adapting to sea level rise. The Local Coastal Plan regulates lands in the Coastal Zone as defined under California Law.

In the last few years, Sonoma County has focused on climate change and sea level rise. The County is updating its Local Coastal Plan for several reasons, one of which is to reflect the potential impacts of sea level rise and storm events on its coastal residents, infrastructure, and natural resources and to develop appropriate policies and actions to avoid and minimize those impacts. This Focused Vulnerability Assessment informs the Sonoma County Local Coastal Plan Update, and is part of an ongoing scientific, engineering, and public process to understand and prepare for the impacts of sea level rise.

This Focused Vulnerability Assessment tracks the Coastal Commission's Guidance, is consistent with planning standards used in hazards mitigation planning, and will be used to inform policies in the Local Coastal Plan Update. The Assessment is advisory and not regulatory.

Climate Change and Sea Level Rise

Climate change is affecting natural and built systems around the world, including the California coast. In the past century, average global temperature has increased about 1.4°F, and average global sea level has increased 7 to 8 inches. Sea level at the San Francisco tide gauge has risen 8 inches over the past century, and the National Research Council (NRC) projects that by 2100, sea level in California south of Cape Mendocino may rise 66 inches. Recent research shows that

in the worst case scenario, sea-level could rise 70 inches by 2100. The two major causes of global sea level rise are thermal expansion of warming oceans and the melting of land-based glaciers and polar ice caps. While Sonoma County's ocean coast regularly experiences erosion, flooding, and significant storm events, sea level rise would exacerbate these natural processes, and lead to significant social, environmental, and economic impacts. The third National Climate Assessment cites strong evidence showing that the cost of doing nothing exceeds the costs associated with adapting to sea level rise by 4 to 10 times. Therefore, it is critically important that Sonoma County plan and prepare to adapt to sea level rise to ensure public resources and coastal communities are resilient for present and future generations.

The Sonoma County coastline encompasses two characteristically distinct coasts (1) north of the Russian River is a rocky coast with tall bluffs punctuated with small coves; and (2) south of its mouth the coastline is comprised of low-lying grassland, sandy dunes, and pocket beaches. Exposure to coastal erosion and inundation caused by sea level rise and storm events differs significantly along the Sonoma County coastline, with distinct breaks north and south of the mouth of the Russian River. North of Jenner, the high rocky cliffs shelter much of the coastline, and extend into a rocky continental shelf dominated by kelp beds to the border with Mendocino County. The coastline south of Jenner includes the Russian River Estuary and sediment deposition influences hydrology and fisheries through inland Sonoma County. Moving south of Jenner the open coast and low lying beaches allow for greater coastal exposure; and habitats include beaches, high and low dunes, and wetlands extending south along the coast around Bodega Head and to the border with Marin County. These habitats provide some buffering of the coastline from the effects of erosion and inundation. The inland extent of Bodega Harbor is open to wave erosion due to the shallow waters and small amount of fetch. (Center for Ocean Solutions 2016a & b).

The high dunes at Doran Beach along the southern extent of Bodega Bay protect the inner harbor from northwest swells and the impacts of waves. This protection has allowed for the formation of diverse and complex inner harbor tidal mudflat, eelgrass beds, and salt marsh habitats. These habitats host a diversity of species including endangered salmonids, shorebirds, and occasionally seals, which feed on shellfish and invertebrates and seek refuge in the inner harbor. These inner harbor habitats also buffer the effects of shoreline erosion, sedimentation, and inundation during storm events by absorbing excess sediment and the nutrients necessary for production of eelgrass, shellfish, and invertebrates. (Center for Ocean Solutions 2016a & b).

2. Methods

This Focused Vulnerability Assessment process is guided by the California Coastal Commission's August 2015 *Sea Level Rise Policy Guidance*, similar to the California Emergency Management Agency's July 2012 *Climate Adaptation Planning Guide*, used by Marin County in its *Draft Marin Coast Sea Level Rise Vulnerability Assessment*. The Focused Vulnerability Assessment provides background and analysis for individuals, communities, Sonoma County, and local and state agencies to use in planning for and adapting to sea level rise.

This Focused Vulnerability Assessment does not address erosion. In addition, it does not address property under the jurisdiction of the state or federal government, including the Sonoma Coast State Park and Beach and U.S. Coast Guard Station.

In order to organize the analysis of Bodega Bay for this Assessment, we sectioned the community into three Areas: the Bodega Harbor Area to the north, Highway 1 Area to the east, and County Regional Parks Area to the south (**Figure 2**).

Modeling

Table 1 shows the range of sea level rise projections for the San Francisco, California region adopted by the National Research Council (NRC) in 2012. The NRC projections are the basis for the projections used in this Focused Vulnerability Assessment. Given the uncertainty in the magnitude and timing of future sea level rise, Sonoma County (and Marin County) used a scenario-based approach to assess a range of potential sea level rise impacts. Assessing a range of scenarios provides a framework for analyzing the vulnerability of Sonoma County's assets to sea level rise and storm events. The five scenarios selected for this Vulnerability Assessment are derived from the U.S. Geological Survey's (USGS) Coastal Storm Modeling System (CoSMoS; Storm Model).

Table 1. Sea Level Rise Projections for San Francisco, CA Region

Year	Projected Rise in Sea Level
2030	0.13 – 0.98 feet (4 – 30 cm)
2050	0.39 – 2 feet (12 – 61 cm)
2100	1.38 – 5.48 feet (42 – 167 cm)

Source: National Research Council (2012)

Sea level rise projections used in this analysis are from the Our Coast Our Future (OCOF) website and tool. OCOF was developed through a partnership of several notable institutions and agencies and represents the best available sea level rise and coastal storm science for the Bay Area Region and other parts of coastal California. OCOF uses the USGS Digital Elevation Model (DEM; Elevation Model) constructed for the region with 2-meter horizontal grid resolution and the Storm Model to produce a combination of 40 different sea level rise and storm scenarios. These scenarios include sea level rise, tides, storm surge, El Niño effects, wave set up, and wave run up. High quality elevation data incorporated into the Elevation Model delineates the current mean higher high water (MHHW) tidal elevation plus sea level rise heights and provides the option to add storm scenarios. Because the Elevation Model uses the highest tide measured, properties exposed to MHHW could be dry at lower tides. It is important to note that this tool only accounts for ocean levels and does not incorporate impacts from creek flooding or changes in the coastline (geomorphology) as erosion continues.



Sonoma County selected the sea level rise and storm scenarios in **Table 2** based on the National Research Council sea level rise projections in **Table 1** and the geographic extent and variety of storm severity. When combined, these scenarios cover a full range of impact to affected coastal communities by the end of this century. Scenarios 2-5 are the same scenarios Marin County used in its *Marin Coast Sea Level Rise Vulnerability Assessment*. Scenario 1 represents existing conditions. Scenario 2 represents near-term, and corresponds to the 2030 National Research

Council projected range in sea level rise. Scenario 3 is considered medium-term and is within the 2050 National Research Council sea level rise range. Scenarios 4 and 5 represent the long-term. Scenario 4 corresponds to the 2100 National Research Council sea level rise range. Scenario 5 represents sea level rise by 2100 based on additional research theorizing the worst case scenario for sea level rise summarized by the California Ocean Protection Council Science Advisory Team Working Group in *Rising Seas in California – An Update on Sea Level Rise Science* (Griggs et. al. 2017).

The Scenarios include storm events because they have the potential to cause catastrophic damage and hazardous coastal conditions that could increase in geographic extent as sea-levels rise. The storm frequencies presented in **Table 2** are the annual, 20-year, and 100-year storms. An annual storm has a high likelihood of happening in most years; a 20-year storm has a five percent chance of happening annually; and a 100-year storm has a one percent chance of happening in any given year.

Future storm conditions depend on the complicated interaction between the Earth's atmosphere and ocean systems, which the Storm Model attempts to simulate. Replicating storm scenarios

within the model is also difficult due to altered wave conditions varying between different storm events. Lower lying portions of Bodega Bay may experience more inundation during a five or 10-year storm event due to increased water levels, wave heights, storm surges, and altered patterns of erosion and accretion of the ocean floor. For example, the Storm Model has higher wave heights offshore than the 20-year storm; however the waves approach the coast from a more northerly direction.

Table 2. Sea Level Rise and Storm Scenarios Used in Focused Vulnerability Assessment

Scenario	Projected Sea Level Rise		Storm Event
	feet	cm	
1 - 2016	0	0	annual
2 - 2030	0.83	25	20-year
3 - 2050	1.67	50	20-year
4 – 2100 Best Case	3.33	100	100-year
5 – 2100 Worst Case	6.56	200	100-year

Assessment

An asset's vulnerability depends on its exposure, sensitivity, and its capacity to adapt to sea level rise and storm events. This Focused Vulnerability Assessment analyzes almost 40 exposed Residential, Commercial, Marine Industrial, Public Utility, Public Infrastructure, Public Access & Recreation, Private Recreation, and Wetland assets. We identified the assets that could be vulnerable to sea level rise and storm events by developing a "Sonoma County Sea Level Rise Viewer" based on the National Oceanic and Atmospheric Administration (NOAA) *Sea Level Rise and Coastal Flooding Impacts Viewer*. Geographic data layers for parcels, building footprints, land use, public & protected lands, trails, infrastructure, schools, riparian corridors, wetlands, and marine habitats were added.

To assess the potential flooding or inundation of an asset other than roads and the California Coastal Trail (Coastal Trail), a GIS shapefile was created and then entered into the Storm Model on the OCOF site to produce an "OCOF Sea Level Rise and Scenario Report". The OCOF Report includes area and elevation information and two tables: "Projected Percent Area Flooded for the Selected Area" and "Projected Average Flood Depth for the Selected Area." Based on that information, a Table was prepared showing projections for inundation (sea level rise alone) and flood (sea level rise plus storm event) as percent of the selected area.

Permit Sonoma staff assessed the potential temporary flooding or permanent inundation of County Roads or the Coastal Trail (linear assets), by measuring the total length of the road or trail on the Sonoma County Sea Level Rise Viewer. Then using the OCOF site to measure the projected temporary flooding or permanent inundation of the road or trail, staff then went back to the Sonoma County Coast Sea Level Rise Viewer to approximate and measure the extent of the flood or inundation impacts. Staff added the lengths of sections of affected road or trail together to obtain the total length of affected road or trail. Staff used the total affected length divided by the entire road length or trail to obtain the percent of road or trail inundated or flooded. Using the process above, Staff formulated the potential temporary flooding or permanent inundation of linear assets for all Sea Level Rise and Storm Scenarios in **Table 2**.

Coastal Wetland Categories

Data on the location and size of coastal wetlands is from the San Francisco Estuary Institute and Aquatic Science Center, part of the California Aquatic Resource Inventory (CARI; Inventory). The Inventory is a compilation of wetlands, streams, and riparian areas in California. This statewide dataset pulls together many sources of wetland data. In the case of Sonoma County, the National Wetlands Inventory, originally from the U.S. Fish and Wildlife Service, is the source of the wetland data. The National Wetlands Inventory was last updated in 2010 and was acquired by the San Francisco Estuary Institute in 2011. **Table 3** identifies the California Aquatic Resource Inventory wetland classifications comprising the Coastal Freshwater Marsh, Coastal Brackish Marsh, and Bodega Harbor Tidal Mudflat wetland categories.



Coastal Brackish Marsh

Table 3. California Aquatic Resource Inventory Classifications Comprising Wetland Categories

Coastal Freshwater Marsh
Freshwater Emergent Wetland - Depressional Seasonal Natural Emergent Freshwater Emergent Wetland - Depressional Seasonal Natural Emergent Freshwater Emergent Wetland - Depressional Seasonal Unnatural Emergent Freshwater Forested/Shrub Wetland - Depressional Seasonal Natural Shrub-Scrub Freshwater Forested/Shrub Wetland - Depressional Seasonal Natural Shrub-Scrub Freshwater Forested/Shrub Wetland - Depressional Seasonal Unnatural Shrub-Scrub
Coastal Brackish Marsh
Estuarine and Marine Wetland - Estuarine Saline Natural Intertidal Emergent Estuarine and Marine Wetland - Estuarine Saline Natural Intertidal Emergent
Bodega Harbor Tidal Mudflat
Estuarine and Marine Wetland - Estuarine Saline Unnatural Intertidal Non-Vegetated Estuarine and Marine Wetland - Estuarine Saline Unnatural Intertidal Vegetated

3. Bodega Bay Community Profile

Bodega Bay is a small rural community and harbor located approximately 40 miles northwest of San Francisco and 20 miles west of Santa Rosa in Sonoma County, California. The Bodega Bay Census Designated Place (CDP) has a total area of 12.5 square miles, of which 8.3 square miles of it is land and 4.2 square miles of it is water. The population of Bodega Bay was 1,411 in 2014 and 1,077 in 2010. Residential density is concentrated along Bay Flat Road and Westshore Road and near Highway 1.

Bodega Bay is a marine habitat used for navigation, recreation, and commercial and sport fishing. It is about 5 miles across and straddles the boundary between Sonoma County to the north and Marin County to the south, connecting to the mouth of Tomales Bay in Marin County. Bodega Head protects the Bay on its north end from the Pacific Ocean. Bodega Head shelters the harbor and separates it from the main bay by a jetty. The village of Bodega Bay sits on the east side of the harbor. North of the village lies a long coastal exposure of alternating rock outcrops and the sandy beaches of Sonoma Coast State Park. On the coast immediately north of Bodega Head is the University of California's Bodega Bay Marine Laboratory.

All coastal drainages between Salmon Creek and Point Reyes flow into Bodega Bay, creating a complex of fresh and brackish water marshes, tidal mudflats and coastal wetlands. Two main freshwater inputs are Johnson Gulch to the north and Cheney Gulch towards the east. The Bodega Harbor estuary empties southerly into Bodega Bay. The Estero Americano and Estero de San Antonio empty into Bodega Bay along its eastern side and Tomales Bay flows northerly into Bodega Bay. The Tomales Bay Peninsula lies across from Bodega Head, and together they create a neck for the outflow and allow Bodega Bay to function as a marine estuary (2014 Pacific Coast Joint Venture Strategic Plan). **Figures 3 and 4** show the coastal wetlands in the Bodega Bay study area.

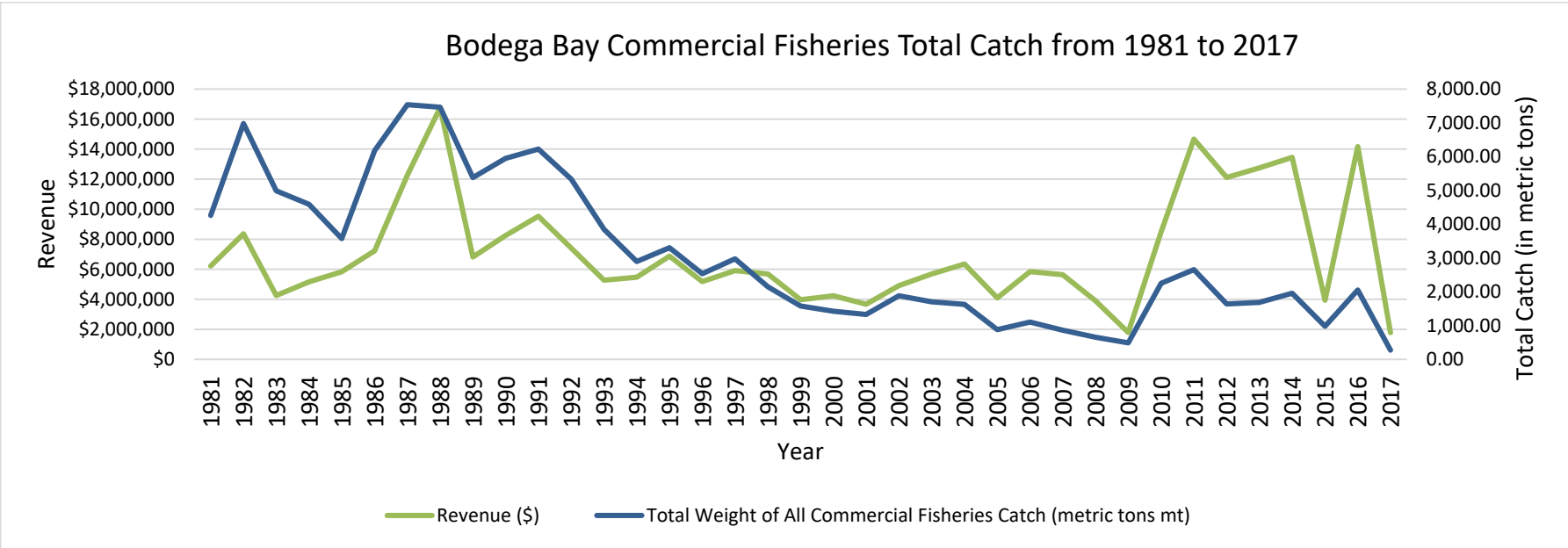
Commercial fishing remains a major component of Bodega Bay's economy. As of 2007, there was one commercial fish processing plant to which 317 commercially registered vessels delivered fish. **Figure 5** depicts the total catch in Bodega Bay commercial fisheries from 1981 to 2017. The sharp decline in 2015 is due to state officials closing the Dungeness crab fishery due to a harmful algal bloom. **Table 4** shows the 2016 total catch by west coast fishery and revenue in Bodega Bay commercial fisheries.

Table 4. 2016 Total Catch (Metric Tons) and Revenue in Bodega Bay Commercial Fisheries

West Coast Fishery	Total Catch (metric tons)	Revenue
Coastal Pelagic	0	\$0
Crab	1,816.5	\$1,047,625
Groundfish	89	\$639,074
Highly Migratory Species	0	\$0
Rockfish	3.4	\$13,759
Salmon	48.9	\$836,848

Source: Pacific Fisheries Information Network (2017)

Figure 5. Bodega Bay Commercial Fisheries: Total Catch (Metric Tons) 1981 to 2017



Marinas in Bodega Bay include the private Porto Bodega Marina & RV Park; and Mason's Marina, Spud Point Marina, and Bodega Bay Sport Fishing Center managed by Sonoma County Regional Parks. At Spud Point Marina, 80 percent of the berths are allocated to commercial fishing. Sonoma County Regional Parks also provides public boat launches at Doran Beach and Westside Regional Parks.

Commercial fishing remains a major component of Bodega Bay's economy. Expanding recreational opportunities to State and County parks in the region has increased exponentially in recent years, substantially increasing tourism to Bodega Bay. Sonoma Coast State Park encompasses 10,272 acres immediately west and north of the bay. Sonoma County Regional Parks manages Doran Beach Regional Park at the south end of the harbor and Westside Regional Park on the west side of the harbor.

About 20 businesses in Bodega Bay offer overnight accommodations including inns, hotels, bed and breakfasts, and an RV park. Four campgrounds provide low cost visitor-serving accommodations. California State Parks manages the Dunes and Wrights Beach Campgrounds in Sonoma Coast State Park, and Sonoma County Regional Parks manages the campgrounds at Doran Beach and Westside Regional Parks. **Figures 6-7** show the locations of the California Coastal Trail and County Regional Parks trails in the Bodega Bay study area.

Annual festivals demonstrate the economic and cultural significance of fishing to the Bodega Bay community: the Fisherman's Festival and Blessing of the Fleet for the approaching salmon season in April and The Seafood, Art, Music, and Wine Festival in August.



Spud Point Marina

4. Flooding and Sea Level Rise Inundation: Impacts at Bodega Bay

Bodega Harbor Area

The Bodega Harbor Area is the North Bay, encompassing the area from Spud Point Marina to the north end of the bay, and to the Bodega Bay Sports Fishing Center on the east. Bodega Harbor Area contains all of the Marine Industrial uses (marinas), the only Rural Residential development, and the largest area of Urban Residential development in Bodega Bay. Additional Bodega Harbor Area assets include Wetlands, County Roads, and County Trails. **Figure 8a** shows the location of and number assigned to each asset.

Assets in the Bodega Harbor Area vulnerable to sea level rise and storm events include Westshore, Eastshore, and Bay Flat Roads; public and private marinas; residential development; and coastal freshwater marsh and tidal mudflat. Sea level rise will impact these valuable assets leading to potential impacts on access; land use; habitats, including critical habitat; recreation and tourism; and commercial fishing. The floating docks at some of the marinas are resilient to rising tides; however, the residential development and the low-cost visitor-serving facilities at marinas are not as adaptable. Some residential buildings may not have direct impacts from sea level rise due to their elevation, but could become isolated and cut-off from all services due to compromised access and damaged utilities.



Bodega Harbor Area

Sea level rise will increase the salinity in freshwater sources, such as Johnson Gulch and Cheney Gulch, the two main sources freshwater to the harbor. The U.S. Fish and Wildlife Service have designated the coastal brackish water marsh at Johnson Gulch along Eastshore Road (FWMARSH-1 on **Figure 8a**) as a tidewater goby (*Eucyclogobius newberryi*) recovery sub-unit. Johnson Gulch marsh supports special status aquatic and terrestrial species. Bodega Harbor also provides rearing habitat for listed salmonids. The flow of freshwater from Johnson and Cheney Gulches into Bodega Harbor has created brackish tidal mudflats at their

convergence. As sea level rise results in higher tides, the brackish mixing of these two systems will occur further upstream, which would impact the type and diversity of plant and animal species in the gulches, potentially jeopardizing critical habitat for listed species.

The sections below provide information on the percentage area of each asset that would be inundated or flooded as a result of sea level rise and storm events and potential impacts.

Coastal Wetlands

The Bodega Harbor Area contains two types of coastal wetlands exposed to sea level rise and storm events: (1) Coastal Freshwater Marsh and (2) Bodega Harbor Tidal Mudflat.

Coastal Freshwater Marsh

Coastal Freshwater Marsh occurs in two locations: 1) the boat storage area at the eastern end of Porto Bodega Marina & RV Park to the east toward State Highway 1 (FWMARSH-1 on **Figure 8a**); and 2) north and west of Westshore Road near where it becomes Bay Flat Road (Rail Ponds; FWMARSH-2). The Rail Ponds have some characteristics of coastal brackish marsh. The Rail Ponds area was originally a coastal marsh connected to Bodega Harbor. Development of Westshore Road in 1963 separated the Rail Ponds from the bay shoreline. The Rail Ponds are labeled coastal freshwater marsh but are tidally influenced by an existing connection to Bodega Harbor. They receive freshwater from groundwater inputs and saltwater through culverts carrying the tidal flow under Westshore Road from Bodega Harbor (California Coastal Commission 2012). Vegetation in the Rail Ponds includes coastal brackish marsh plant species - salt grass (*Distichlis spicata*), franconia (*Frankenia salina*), pickleweed (*Salicornia sp.*), and cordgrass (*Spartina foliosa*).

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Coastal Freshwater Marsh. **Table 5** shows the projected percent of marsh area permanently inundated by sea level rise and with storm event flooding. **Figure 8b** illustrates the projected permanent inundation, and **Figure 8c** illustrates the projected permanent inundation with storm event flooding of Coastal Freshwater Marsh under Scenario 5 (2100 Sea Level Rise Worst Case).

FWMARSH-1 is not projected to be at risk of permanent inundation from sea level rise by 2100. However, in 2100 the marsh would experience periodic flooding during storm events at less than 1% of the marsh under the best case scenario and 3% under the worst case scenario.

FWMARSH-2 is projected to be at risk of inundation from sea level rise by 2100. In 2030 the marsh would not be permanently inundated by sea level rise and 17% of the marsh would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 37% of the marsh would be permanently inundated and 53% would be subject to periodic flooding during storm events. In 2100 under the worst case scenario, 53% of the marsh would be permanently inundated and subject to periodic flooding.

Coastal habitats are likely to differ in their vulnerability and response to climate related stressors depending on coastal exposure and local conditions. For example, as sea level rises, coastal deltas and mudflats are likely to be lost to open water. Wetlands and coastal dunes exposed to coastal hazards can migrate upslope given a path free of barriers from coastal development or shoreline hardening. The California Department of Fish and Wildlife has identified wetlands as a sensitive natural community that is vulnerable to further degradation from sea level rise inundation, flooding, and development.

Table 5. Bodega Harbor Area: Coastal Freshwater Marsh – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	FWMARSH-1 9.95 acres		FWMARSH-2 1.97 acres	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----	----	----
2 - 2030	0.83	25	20-year	----	----	----	17%
3 - 2050	1.67	50	20-year	----	----	----	39%
4 – 2100 Best Case	3.33	100	100-year	----	< 1%	37%	53%
5 – 2100 Worst Case	6.56	200	100-year	----	3%	53%	53%

Bodega Harbor contains about 107 acres of Coastal Freshwater Marsh and 70 acres of Coastal Brackish Marsh. There are three major ways by which sea level rise can disrupt a marsh: inundation, erosion, and saltwater intrusion. The natural impact of a rising sea is to cause marsh systems to migrate upward and inland. Sea level rise increases the frequency and/or duration of tidal flooding throughout a marsh. If no inorganic sediment or peat is added to the marsh, the seaward portions become flooded so much that marsh grass drowns and marsh soil erodes; portions of the high marsh become low marsh; and upland areas immediately above the former spring tide level are temporarily flooded at spring tide, becoming high marsh. If nearby rivers or floods supply additional sediment, sea level rise slows the rate at which the marsh advances seaward.

Wetlands can grow upward fast enough to keep pace with the slow rise in sea level that most areas have experienced in the recent past. Thus, areas that might have been covered with two or three meters of water (or more) have wetlands instead. If sea level rise accelerates only slightly, marshes that are advancing today may have sufficient sediment to keep pace with sea level. But if sea level rise accelerates more rapidly, the sea will be rising much more rapidly than the demonstrated ability of wetlands to grow upward in most areas, and the increase in wetland acreage of the last few thousand years will be negated. If adjacent upland areas are developed, all the wetlands could be lost.

The net change in total marsh acreage depends on the slopes of the marsh and upland areas. If the land has a constant slope throughout the marsh and upland, then the area lost to marsh drowning will be equal to the area gained by the landward encroachment of spring high tides. In most areas, however, the slope above the marsh is steeper than the marsh, so a rise in sea level causes a net loss of marsh acreage.

The U.S. Fish and Wildlife Service has designated the coastal freshwater marsh at Johnson Gulch along Eastshore Road (FWMARSH-1 on **Figure 3**) as a tidewater goby (*Eucyclogobius newberryi*) recovery sub-unit. This marsh supports special status aquatic and terrestrial species. The ability of this freshwater marsh to migrate inland is limited because the marsh is already narrow and backed by residential development. However, under the near-term and medium-term sea level rise scenarios, this marsh habitat would buffer the effects of sea level rise for the residential development by absorbing the rising water and sediment.

Bodega Harbor Tidal Mudflat

Bodega Harbor Tidal Mudflat occurs in two locations: (1) west of Porto Bodega Marina & RV Park (1.70 acres; TIDFLT-1 on **Figure 8a**) and (2) east of the Porto Bodega Marina & RV Park and south of the Bodega Bay Sport Fishing Center (5.12 acres; TIDFLT-2).

Potential Flooding and Inundation Impacts

Data on projected inundation and flooding of Bodega Harbor Tidal Mudflat is not available.

Bodega Harbor contains about 480 acres of Tidal Mudflat that support about 130 acres of Eelgrass Bed. Bodega Harbor Tidal Mudflat links marine, freshwater, and terrestrial habitats; as well as provides economic and recreational benefits to the community. Tidal mudflats form unique habitats and maintain valuable ecosystems, buffering eelgrass beds from excess sedimentation, providing habitat for wildlife, and protecting terrestrial infrastructure from inundation (Thorne 2015). Bodega Harbor tidal waters ebb and flow over the central harbor mudflats depositing suspended sediments and organic matter from local plant production. This ecosystem is particularly unique in that the tidal velocity profile of Bodega Harbor show that water within the channel moves uniformly from top to bottom at fairly rapid flow rates, indicating a large throughput through the system and that the harbor flushes itself, contaminants, and sediments out daily (Rasmussen 2004).

Climate change effects such as sea level rise are altering this habitat, and coastal models are available to extrapolate potential effects until more site specific research is conducted. Tidal mudflat survival depends on the balance between the forces that lead to their creation (mineral and organic sediment accumulation) and the forces that lead to their deterioration (sea level rise, subsidence, and wave erosion). Sea level rise impacts to mudflats over the short and mid-term are controlled by the rate of vertical development (when accumulation exceeds deterioration) compared to relative sea level rise (the combination of the change in sea level and the change in land level; Cahoon 2010).

USGS models predict that over long-term sea level rise, mudflat deterioration will overpower accumulation, vertical development will lag behind sea level rise, permanent inundation will result in below optimum growth range for eelgrass, and tidal mudflat will convert to intertidal mudflat or subtidal open water (Cahoon 2010).

The flow of freshwater from Johnson Gulch into Bodega Harbor has created brackish tidal mudflat at their convergence. As sea level rise results in higher tides, the brackish mixing of these two systems will occur further upstream, which would impact the type and diversity of plant and animal species in the gulches, potentially jeopardizing important habitat for endangered species.

Public Access & Recreation – Trails

The Bodega Harbor Area contains a portion of one segment of the California Coastal Trail (Coastal Trail) exposed to sea level rise and storm events: an Existing Coastal Trail segment along the east side of Bodega Bay (0.54 miles, 2,849 feet). **Figure 6** shows the locations of Coastal Trail segments in the Bodega Bay Study Area.

Potential Inundation and Flood Impacts

Sea level rise and storm events may result in inundation and would result in flooding of the Coastal Trail segment. **Figure 8b** illustrates the projected permanent inundation, and **Figure 8c** illustrates the projected permanent inundation with storm event flooding of the Coastal Trail segment under Scenario 5 (2100 Sea Level Rise Worst Case).

Temporary flooding of an Existing Coastal Trail segment would result in trail damage and disrepair and require temporary closure or routing to an alternative trail segment during trail repair or re-construction. Permanent inundation of an Existing Coastal Trail segment would require relocation of the segment. The level of difficulty in relocating a Coastal Trail segment would depend on the sources of funding and the specific terms of easements with private property owners.

Marine Industrial

Bodega Harbor is the hub of commercial and sport fishing in Sonoma County, and is a popular destination during crab and salmon seasons. The marinas in the Bodega Harbor Area exposed to sea level rise and storm events include Porto Bodega Marina & RV Park (MI-1 on **Figure 8a**), Bodega Bay Sport Fishing Center (MI-2); Mason's Marina (MI-3E: east side of Westshore Road, MI-3BW: west side of Westshore Road); and Spud Point Marina (MI-4).

Porto Bodega Marina & RV Park (MI-1). The Porto Bodega Marina & RV Park is a privately owned resort off Bay Flat Road consisting of 75 open boat slips, guest docks, 58 RV sites, 2 vacation rentals, boat trailer parking, club house, and laundry.

Bodega Bay Sport Fishing Center (MI-2). The Bodega Bay Sport Fishing Center is a County-owned and operated facility east of the Porto Bodega Marina & RV Park. The County has a license agreement with sport fishing boat operators to allow them to use the Bodega Bay Sport Fishing Center License for party boats for fishing, whale watching, pelagic bird watching, and sightseeing. The facility includes a dock, boat launch, bait and tackle shop, and parking.

Mason's Marina (MI-3E & MI-3W). Mason's Marina is a County-owned and operated marina off Westshore Road that serves commercial fishing boats as well as recreational vessels including sailboats and motor launches. A small paved parking area and dock are used for fish-buying (MI-3E). The area on the west side of Westshore Road is used for storing crab pots (MI-3W).

Spud Point Marina (MI-4). Spud Point Marina is a County-owned and operated marina off Westshore Road that serves users of overnight and monthly berths and yacht club cruisers. It

consists of stable docks, fuel dock, guest dock and overnight berths, fishing and observation piers, tenant and public restrooms, laundry, dry dock storage, and parking.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Marine Industrial assets. The marina assets analyzed comprise landside facilities only and do not include the piers or docks. **Table 6** shows the projected percent area of the marinas permanently inundated by sea level rise and with storm event flooding. **Figure 8b** illustrates the projected permanent inundation, and **Figure 8c** illustrates the projected permanent inundation with storm event flooding of the marinas under Scenario 5 (2100 Sea Level Rise Worst Case).

All of the marinas are projected to be at risk of inundation from sea level rise by 2100. Porto Bodega Marina & RV Park and Mason's Marina would be more at risk than the other marinas.

Porto Bodega Marina & RV Park. In 2030 3% of the marina would be permanently inundated by sea level rise and less than 1% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 55% of the marina would be permanently inundated and 86% would be subject to periodic flooding during storm events. Under the worst case scenario, 65% of the marina would be permanently inundated and 95% would be subject to periodic flooding.

Bodega Bay Sport Fishing Center. In 2030 the marina would not be permanently inundated by sea level rise and less than 1% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, less than 1% of the marina would be permanently inundated and 18% would be subject to periodic flooding during storm events. Under the worst case scenario, 59% of the marina would be permanently inundated and 84% would be subject to periodic flooding.

Mason's Marina (East). In 2030 less than 1% of the marina would be permanently inundated by sea level rise and 44% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 91% of the marina would be permanently inundated and 99% would be subject to periodic flooding during storm events. Under the worst case scenario, 99% of the marina would be permanently inundated and subject to periodic flooding.

Mason's Marina (West). In 2030 the marina would not be permanently inundated by sea level rise and less than 1% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 50% of the marina would be permanently inundated and 86% would be subject to periodic flooding during storm events. Under the worst case scenario, 69% of the marina would be permanently inundated and 95% would be subject to periodic flooding.

Spud Point Marina. In 2030 the marina would not be permanently inundated by sea level rise and 2% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 8% of the marina would be permanently inundated and 45% would be subject to periodic flooding during storm events. Under the worst case scenario, 63% of the marina would be permanently inundated and 81% would be subject to periodic flooding.

Table 6. Bodega Harbor Area: Marine Industrial Assets – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	Porto Bodega Marina & RV Park <i>MI-1</i> <i>10.34 acres</i>		Bodega Bay Sport Fishing Center <i>MI-2</i> <i>1.54 acres</i>		Mason's Marina <i>MI-3E</i> <i>1.51 acres</i>		Mason's Marina <i>MI-3W</i> <i>3.45 acres</i>		<i>Spud Point Marina</i> <i>MI-4</i> <i>3.32 acres</i>	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	< 1%	----	----	----	----	6%	----	----	----	----
2 - 2030	0.83	25	20-year	3%	< 1%	----	< 1%	< 1%	44%	----	< 1%	----	2%
3 - 2050	1.67	50	20-year	7%	50%	< 1%	< 1%	< 1%	94%	----	50%	----	9%
4 – 2100 Best Case	3.33	100	100-year	55%	86%	< 1%	18%	91%	99%	50%	86%	8%	45%
5 – 2100 Worst Case	6.56	200	100-year	65%	95%	59%	84%	99%	99%	69%	95%	63%	81%

Permanent inundation of all or a portion of marinas would result in the loss of marine industrial land area to bay waters.



Porto Bodega Marina & RV Park

Temporary flooding and permanent inundation from sea level rise would damage and impair land-based facilities at marinas, potentially rendering them inoperable, including: the clubhouse, laundry, and boat trailer parking at Porto Bodega Marina & RV Park; bait and tackle shop, boat launch, and parking at the Bodega Bay Sport Fishing Center; crab pot storage and parking area at Mason's Marina; and restrooms,

laundry, dry dock storage, and parking area at Spud Point Marina. Storm flooding, sea level rise, daily tidal flooding, and erosion would damage and impair docks. Temporary flooding and permanent inundation would impede or prevent access to and from the marinas.

Permanent inundation of the land-based portion of the marinas would result in loss of marine industrial area land.

Permanent inundation of Porto Bodega Marina & RV Park would result in loss of some or all of the RV sites, which would result in the temporary or permanent relocation of residents and loss of affordable housing.

Impacts on land-based facilities, docks, and public access at the marinas and the loss of marine industrial land would decrease sport fishing and other recreational opportunities at Bodega Bay, which would decrease tourism to Bodega Bay and result in the loss of tourist revenue.

Impacts on land-based facilities, docks, and public access at Mason's Marina and Spud Point Marina and the loss of marine industrial area land would decrease commercial fishing opportunities at Bodega Bay, which would reduce the viability of Bodega Bay's commercial fishing industry.

County Roads

The Bodega Harbor Area includes three County Roads exposed to sea level rise and storm events – Eastshore Road, Bay Flat Road, and Westshore Road. **Figure 8a** shows the location of these roads.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Eastshore Road, Bay Flat Road, and Westshore Road. **Table 7** shows the projected percent of road alignment permanently inundated by sea level rise and with storm event flooding. **Figure 8b** illustrates the projected permanent inundation, and **Figure 8c** illustrates the projected permanent inundation with storm event flooding of the roads under Scenario 5 (2100 Sea Level Rise Worst Case).

Table 7. Bodega Harbor Area: County Roads – Inundation and Flood Projections (Percent Alignment)

Scenario	Projected Sea Level Rise		Storm Event	<i>Eastshore Road</i> 2,791.5 feet (0.53 mi)		<i>Bay Flat Road</i> 8,435.1 feet (1.60 mi)		<i>Westshore Road</i> 4,896.2 feet (0.93 mi)	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----	----	----	----	3%
2 - 2030	0.83	25	20-year	----	11%	----	2%	< 1%	16%
3 - 2050	1.67	50	20-year	< 1%	32%	----	16%	< 1%	48%
4 – 2100 Best Case	3.33	100	100-year	33%	37%	16%	26%	52%	78%
5 – 2100 Worst Case	6.56	200	100-year	35%	39%	28%	44%	76%	82%

These County Roads are projected to be at risk of inundation from sea level rise between 2050 and 2100. Westshore Road is the more at risk than the other County Roads.

Eastshore Road. In 2030 the road would not be permanently inundated by sea level rise and 11% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 33% of the road would be permanently inundated and 37% would be subject to periodic flooding during storm events. Under the worst case scenario, 35% of the road would be permanently inundated and 39% would be subject to periodic flooding during storm events.

Bay Flat Road. In 2030 the road would not be permanently inundated by sea level rise and 2% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 16% of the road would be permanently inundated and 26% would be subject to periodic flooding during storm events. Under the worst case scenario, 28% of the road would be permanently inundated and 44% would be subject to periodic flooding.

Westshore Road. In 2030 less than 1% of the road would be permanently inundated by sea level rise and 16% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 52% of the road would be permanently inundated and 78% would be

subject to periodic flooding during storm events. Under the worst case scenario, 76% of the road would be permanently inundated and 82% would be subject to periodic flooding.

Temporary flooding of County Roads would cause road closures during a flood event and result in road damage and accelerated deterioration. Recurring damage and deterioration from flooding could result in road failure or capacity restrictions. Road closures would temporarily restrict access to and from homes, businesses, or park and recreation areas. Residents may not be able to evacuate in emergencies, and emergency vehicles may not be able to reach locations in time, or at all. As road access becomes increasingly limited, so will the carrying capacity for visitors that contribute greatly to the regional economy.

Permanent inundation of County Roads would render road segments impassable, resulting in permanent road closures. As for many of these roads alternative routes are not available, access would be limited or non-existing to and from homes, businesses, or park and recreation areas. Homes and businesses would not be able to perform their primary function and become isolated and cut-off from all services. In the Bodega Harbor Area, permanent inundation of Eastshore, Bay Flat, and Westshore Roads would eliminate access to and from rural and urban residential areas and marinas.

Residential

The Bodega Harbor Area contains three urban residential areas and one rural residential area exposed to sea level rise and storm events. The urban residential areas are north of Porto Bodega Marina & RV Park (UR-1 on **Figure 8a**), northwest of Mason's Marina (UR-2), and west of Spud Point Marina (UR-3). The rural residential area (RR-1) is northeast of UR-2. **Table 8** shows the number of developed and vacant lots and number of dwelling units which comprise these residential areas.

Table 8. Bodega Harbor Area: Residential Assets – Lots and Dwelling Units

Asset	Lots	Vacant Lots	Dwelling Units
RR-1	9	2	7
UR-1	6	1	5
UR-2	60	14	46
UR-3	25	5	20



UR-2 and RR-1

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of these residential areas. **Table 9** shows the projected percent area permanently inundated by sea level rise and with storm event flooding. **Figure 8b** illustrates the projected permanent inundation, and **Figure 8c** illustrates the projected permanent inundation with storm event flooding of the areas under Scenario 5 (2100 Sea Level Rise Worst Case).

All of the residential areas are projected to be at risk of inundation from sea level rise by 2100. RR-1 and UR-2 would be more at risk than the other residential areas.

RR-1. In 2030 the residential area would not be permanently inundated by sea level rise and 3% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 7% of the area would be permanently inundated and 14% would be subject to periodic flooding during storm events. Under the worst case scenario, 14% of the area would be permanently inundated and 23% would be subject to periodic flooding.

UR-1. In 2030 the residential area would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. In 2100 under the best case scenario, the area would not be permanently inundated and less than 1% would be subject to periodic flooding during storm events. Under the worst case scenario, less than 1% of the area would be permanently inundated and 6% would be subject to periodic flooding.

UR-2. In 2030 the residential area would not be permanently inundated by sea level rise and 9% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 10% of the area would be permanently inundated and 13% would be subject to

periodic flooding during storm events. Under the worst case scenario, 10% of the area would be permanently inundated and 19% would be subject to periodic flooding.

UR-3. In 2030 the residential area would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. In 2100 under the best case scenario, the area would not be permanently inundated and 2% would be subject to periodic flooding during storm events. Under the worst case scenario, less than 1% of the area would be permanently inundated and 4% would be subject to periodic flooding.

Permanent inundation of all or a portion of residential properties would result in the loss of residential land area to bay waters.

RR-1. Permanent inundation from sea level rise would affect four properties, resulting in: (1) loss of property frontage, hence the size of the useable area; (2) loss of access to and from residences at Bay Flat Road and Westshore Road (see discussion of impacts on County Roads above), potentially isolating and cutting-off residences from essential services; and (3) the bay being closer to properties and residences, decreasing the buffer between them, which could result in inundation of one residence.

UR-1. Permanent inundation from sea level rise would affect all six properties, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to properties and residences, decreasing the buffer between them, which could result in inundation of six residences.

UR-2. Permanent inundation from sea level rise would affect mainly the area between Westshore Road and Bay Flat Road where several vacant or unbuildable properties are located. Permanent inundation would result in: (1) loss of property frontage, hence the size of the useable area; (2) loss of access to residences from Westshore Road and Bay Flat Road, including the entrance to the residential development at Whaleship Road (see the discussion of impacts on County Roads above); and (3) the bay being closer to properties and residences, decreasing the buffer between them, which could result in inundation of four residences.

UR-3. Permanent inundation from sea level rise would affect two properties, resulting in: (1) loss of access to and from the properties at the intersection of Westshore Road and Bay Flat Road; and (2) the bay being closer to the properties and residences, decreasing the buffer between them, which could result in inundation of two residences.

Table 9. Bodega Harbor Area: Residential Assets – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	<i>RR-1</i> 6.30 acres		<i>UR-1</i> 1.09 acres		<i>UR-2</i> 12.80 acres		<i>UR-3</i> 5.35 acres	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----		----	----	----	----	----	----
2 - 2030	0.83	25	20-year	----	3%	----	----	----	9%	----	----
3 - 2050	1.67	50	20-year	----	8%	----	----	----	10%	----	----
4 – 2100 Best Case	3.33	100	100-year	7%	14%	----	< 1%	10%	13%	----	2%
5 – 2100 Worst Case	6.56	200	100-year	14%	23%	< 1%	6%	10%	19%	< 1%	4%

Bodega Harbor Area - Summary

Potential Impacts

Table 10 summarizes the projected percent of Bodega Harbor Area assets permanently inundated by sea level rise in 2100 under the best and worst case scenarios.

By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 59% to 99% of marinas; 28% to 76% of County Roads; 53% of a coastal wetland, and less than 1% to 14% of residential areas.

Table 10. Bodega Harbor Area: Summary of Projected Percent Area of Assets Permanently Inundated by Sea Level Rise by 2100

Asset	Best Case Scenario	Worst Case Scenario
Coastal Wetlands		
FWMARSH-1	----	----
FWMARSH-2	37%	53%
TIDFLT-1	N/A	N/A
TIDFLT-2	N/A	N/A
Public Access and Recreation		
California Coastal Trail	N/A	N/A
Marine Industrial		
Porto Bodega Marina & RV Park	55%	65%
Mason's Marina (East)	91%	99%
Mason's Marina (West)	50%	69%
Bodega Bay Sport Fishing Center	<1%	59%
Spud Point Marina	8%	63%
County Roads		
Westshore Road	52%	76%
Eastshore Road	33%	35%
Bay Flat Road	16%	28%
Residential		

Asset	Best Case Scenario	Worst Case Scenario
RR-1	7%	14%
UR-1	----	<1%
UR-2	10%	10%
UR-3	----	<1%

Potential Adaptation Strategies

Possible adaptation strategies for the Bodega Harbor Area are retreat and protect. The retreat strategy includes avoiding new development, redeveloping vulnerable infrastructure, and removing damaged infrastructure in hazard areas. Protecting vulnerable road infrastructure in 2030 to 2050 is anticipated until a long-term adaptation strategy has been determined. Section 5 contains a full suite of adaptation strategies for Bodega Bay informed by public outreach.

Bodega Harbor Area adaptation priorities include: (1) avoid new development within mapped hazard areas; (2) consider protection measures for shoreline roads in the short-term, and determine the feasibility of relocating shoreline roads and increasing culvert and roadside ditch capacity in the long-term; and (3) consider developing an abatement program to remove abandoned boats and docks that may degrade harbor water quality.

Highway 1 Area

The Bodega Bay Highway 1 Area is the east bay, encompassing the area from south of the Bodega Bay Sports Fishing Center to the western edge of the Bodega Harbour Subdivision and Golf Course. The Highway 1 Area contains all of the Commercial assets and the only public utility (Bodega Bay Wastewater Treatment Plant) in Bodega Bay; and a smaller area of Urban Residential development compared to the Bodega Harbor Area. Additional Highway 1 Area assets include Wetlands and County Trails. **Figure 9a** shows the location of and number assigned to each asset.

Assets in the Highway 1 Area vulnerable to sea level rise and storm events include Highway 1, residential and commercial buildings on the harbor side of Highway 1; yacht club; wastewater treatment plant; County Regional Parks trails and California Coastal Trail; and coastal freshwater marsh, coastal brackish marsh, and tidal mudflat.

Sea level rise will impact these valuable assets leading to potential impacts on access, land use, recreation and tourism, and habitats. Buildings on the harbor side of Highway 1 are more vulnerable to storm damage and sea level rise than are those on the upland side of Highway 1. Some houses on the harbor side have been elevated on wooden pilings which require maintenance. Boat docks and aquatic infrastructure at the yacht club and other harbor properties are supported by pressure treated wooden piles driven into harbor mud that are not adaptable to changing tidal heights. Residential or commercial buildings that may not be affected by sea level rise due to their elevation could become isolated and cut-off from all services due to compromised access and damaged utilities.

Cheney Gulch is a short drainage that drops steeply from coastal scrub to riparian ravines and freshwater marsh habitat. It supports special status aquatic and terrestrial species such as the California Freshwater Shrimp (*Syncares pacifica*) and California Red-legged frog (*Rana draytonii*).

The sections below provide information on the percentage area of each asset that would be flooded or inundated as a result of sea level rise and storm events and potential impacts.

Coastal Wetlands

The Highway 1 Area contains two types of coastal wetlands: (1) Coastal Freshwater Marsh and (2) Bodega Harbor Tidal Mudflat.

Coastal Freshwater Marsh

Coastal Freshwater Marsh occurs in three locations: (1) on the north side of State Highway 1 opposite COM-2 at 935 State Highway 1 (FWMARSH-1 on **Figure 9a**; 0.80 acres); (2) on both sides of State Highway 1 in the area of Doran Park Road (FWMARSH-2, 8.58 acres); and (3) on the north side of Highway 1 opposite the Dredge Spoil Disposal Ponds site along Cheney Gulch (FWMARSH-3, 4.72 acres).

Potential Inundation and Flood Impacts

According to the analysis based on the Our Coast Our Future (OCOF) website tool and model, these Coastal Freshwater Marsh areas are not at risk of inundation from sea level rise or flooding from storm events by 2100 under the best and worst case scenarios. However, the model is limited in that it does not incorporate tidal flow through culverts. In the case of FWMARSH-3 along Cheney Gulch, there is tidal flow through the culvert under the Highway 1 bridge that affects this marsh, and the Cheney Gulch drainage system extends out to the bay between the Dredge Spoil Disposal Ponds Site and the Bodega Bay PUD Wastewater Treatment Plant. Up to 2050, the coastal freshwater marsh along Cheney Gulch would buffer the effects of sea level rise for the surrounding land uses by absorbing the rising water and sediment. However, sea level rise inundation would have an adverse impact on the non-saline tolerant plant and animal species which occur in or use the marsh. The potential for inland migration of this marsh would be limited because the dredge spoil ponds site, wastewater treatment plant, and residential development confine the drainage.

Public Access & Recreation – Trails and Areas

Trails

The Highway 1 Area contains two County Regional Parks Trails exposed to sea level rise and storm events: (1) Birdwalk Loop Trail (0.6 miles, 3,168 feet) and (2) Cheney Creek Trail (0.5 miles, 2,640 feet). The Area also contains portions of two segments of the California Coastal Trail (Coastal Trail): (1) an Existing Coastal Trail segment at the Dredge Spoil Disposal Ponds Site (0.53 miles, 2,804 feet) and (2) a Proposed Coastal Trail segment along the east side of Bodega Bay (1.1 miles, 5,880 feet). Coastal Trail segments. **Figures 6 and 7** show the locations of Coastal Trail segments and County Regional Parks Trails in the Bodega Bay Study Area.

Potential Inundation and Flood Impacts

Sea level rise and storm events may result in inundation and would result in flooding of the County Regional Parks Trails and Coastal Trail segments. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding in the area of the trails under Scenario 5 (2100 Sea Level Rise Worst Case).

Temporary flooding of a County Regional Parks Trail or Existing Coastal Trail segment would result in trail damage and disrepair and require temporary closure or routing to an alternative trail section during trail repair or re-construction. Permanent inundation of a County Regional Parks Trail or Existing Coastal Trail segment would require relocation of the trail section. The level of difficulty in relocating a County Regional Parks Trail or Existing Coastal Trail segment would depend on the sources of funding and the specific terms of easements with private property owners.

Areas

The Highway 1 Area contains an area consisting of two dredge spoil disposal ponds and a County Regional Parks Trail (Birdwalk Loop Trail). The Dredge Spoil Disposal Ponds Site (PUBACC-1 on **Figure 9a**) is owned and operated by Sonoma County Regional Parks and used by the public for recreation.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of the Dredge Spoil Disposal Ponds Site. **Table 11** shows the projected percent area permanently inundated by sea level rise and with storm event flooding. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding of the Dredge Spoil Disposal Ponds Site under Scenario 5 (2100 Sea Level Rise Worst Case).

The Dredge Spoil Disposal Ponds Site is projected to be at risk of permanent inundation from sea level rise by 2100. In 2030 less than 1% of the site would be permanently inundated by sea level rise and 2% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 2% of the area would be permanently inundated and 3% would be subject to periodic flooding during storm events. Under the worst case scenario, 2% of the area would be permanently inundated and 5% would be subject to periodic flooding.



Birdwalk Loop Trail

Table 11. Highway 1 Area: Dredge Spoil Disposal Ponds Site – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	Dredge Spoil Disposal Ponds Site PUBACC-1 23.91 acres	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	<1%	<1%
2 - 2030	0.83	25	20-year	<1%	2%
3 - 2050	1.67	50	20-year	<1%	2%
4 – 2100 Best Case	3.33	100	100-year	2%	3%
5 – 2100 Worst Case	6.56	200	100-year	2%	5%

Public Utility

The Highway 1 Area includes the only Public Utility in Bodega Bay – the Bodega Bay PUD Wastewater Treatment Plant (UTIL-1 on **Figure 9a**).

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in flooding of the Bodega Bay PUD Wastewater Treatment Plant. **Table 12** shows the projected percent area permanently inundated by sea level rise and with storm event flooding. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding of the public utility site under Scenario 5 (2100 Sea Level Rise Worst Case).

The Bodega Bay PUD Wastewater Treatment Plant is not projected to be at risk of permanent inundation from sea level rise by 2100. However, the utility site would experience periodic flooding during storm events at 40% of the site under the 2100 worst case scenario. Flooding would occur at the southern boundary of the utility property, not at the structures or systems. Periodic flooding during storm events could result in temporary disruption of plant operations.



Bodega Bay PUD Wastewater Treatment Plant

Table 12. Highway 1 Area: Bodega Bay PUD Wastewater Treatment Plant – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	Bodega Bay PUD Wastewater Treatment Plant UTIL-1 4.08 acres	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----
2 - 2030	0.83	25	20-year	----	----
3 - 2050	1.67	50	20-year	----	----
4 – 2100 Best Case	3.33	100	100-year	----	----
5 – 2100 Worst Case	6.56	200	100-year	----	40%

Commercial

The Highway 1 Area includes five commercial areas along the east side of Bodega Bay, four of which are exposed to sea level rise and storm events: the area currently occupied by Diekmann's Bay Store (COM-1 on **Figure 9a**); the area currently occupied by Harbor View Gifts (COM-2); the area currently occupied by Patrick's of Bodega Bay, Gourmet Au Bay, and Tides Wharf Restaurant (COM-3); and the area currently occupied by Fisheterian Fish Market and Lucas Wharf Restaurant & Bar (COM-4). COM-5 is the area currently occupied by Bodega Bay & Beyond, Sonoma Coast Living Real Estate, Coffee Cove, Bodega Bay Escapes, Jessica Brianne Carpenter Photos, and Bodega Coast Inn & Suites.

Potential Inundation and Flooding

Sea level rise and storm events would result in inundation and flooding of these commercial areas. **Table 13** shows the projected percent area permanently inundated by sea level rise and with storm event flooding. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding of the areas under Scenario 5 (2100 Sea Level Rise Worst Case).

All of these commercial areas except COM-5 are projected to be at risk of inundation from sea level rise by 2100. COM-2 and COM-3 would be more at risk than the other commercial areas.

COM-1. In 2030 5% of the area would be permanently inundated by sea level rise and 9% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 10% of the area would be permanently inundated and 14% would be subject to periodic flooding during storm events. Under the worst case scenario, 9% of the area would be permanently inundated and 19% would be subject to periodic flooding.



Lucas Wharf Restaurant & Bar

COM-2. In 2030 the area would not be permanently inundated by sea level rise and 11% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 12% of the area would be permanently inundated and 66% would be subject to periodic flooding during storm events. Under the worst case scenario, 70% of the area would be permanently inundated and 91% would be subject to periodic flooding.

COM-3. In 2030 2% of the area would be permanently inundated by sea level rise and 9% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 10% of the area would be permanently inundated and 14% would be subject to periodic flooding during storm events. Under the worst case scenario, 69% of the area would be permanently inundated and 84% would be subject to periodic flooding.

COM-4. In 2030 5% of the area would be permanently inundated by sea level rise and 16% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 18% of the area would be permanently inundated and 27% would be subject to periodic flooding during storm events. Under the worst case scenario, 34% of the area would be permanently inundated and 56% would be subject to periodic flooding.



Diekmann's Bay Store

Permanent inundation of all or a portion of commercial properties would result in the loss of commercial land area to bay waters.

COM-1 and COM-4. Permanent inundation from sea level rise would result in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the commercial building and parking area, decreasing the buffer between them, which could result in inundation of the building and parking area.

COM-2 and COM-3. Permanent inundation from sea level rise would result in: (1) partial loss of access to the commercial building and parking area; (2) loss of property frontage, hence the size of the useable area; and (3) the bay being closer to the commercial building and parking area, decreasing the buffer between them., which could result in inundation of the building and parking area.

Table 13. Highway 1 Area: Commercial Assets – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	COM-1 0.50 acres		COM-2 0.19 acres		COM-3 3.56 acres		COM-4 1.21 acres		COM-5 5.43 acres	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	2%	< 1%*	----	----	< 1%	3%	2%	5%	----	----
2 - 2030	0.83	25	20-year	5%	9%	----	11%	2%	9%	5%	16%	----	----
3 - 2050	1.67	50	20-year	7%	10%	5%	42%	5%	12%	10%	19%	----	----
4 – 2100 Best Case	3.33	100	100-year	10%	14%	39%	73%	12%	66%	18%	27%	----	----
5 – 2100 Worst Case	6.56	200	100-year	9%**	19%	70%	91%	69%	84%	34%	56%	----	----

* Unknown why a decrease in % area affected with a storm event

** Decrease in permanent inundation under an increase in sea level rise is likely due to a small circulation change that occurs as a result of the higher sea-level and its interaction with flood water (Maya Hayden, Point Blue Conservation Science, personal communication, 201

Private Recreation

Owned and operated by the Bodega Harbour HOA, the Bodega Harbour Yacht Club is the only Private Recreation asset in the Highway 1 Area (PRIV-1 on **Figure 9a**). Situated on the bay off Smith Brothers Road, the Bodega Harbour Yacht Club is a two-story hall with kitchen available for rent.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of the Bodega Harbour Yacht Club. **Table 14** shows the projected percent area of the property permanently inundated by sea level rise and with storm event flooding. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding of the Bodega Harbour Yacht Club property under Scenario 5 (2100 Sea Level Rise Worst Case).

The Bodega Harbour Yacht Club is projected to be at risk of permanent inundation from sea level rise by 2100. In 2030 8% of the site would be permanently inundated by sea level rise and 34% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 13% of the site would be permanently inundated and 49% would be subject to periodic flooding during storm events. Under the worst case scenario, 48% of the site would be permanently inundated and 60% would be subject to periodic flooding.



Bodega Harbour Yacht Club

While inundation and flooding would not prevent access to the Bodega Harbour Yacht Club property at the entrance off Smith Brothers Road, it would impact building ingress (and egress) and most if not all of the parking lot. Impacts on access to the Bodega Harbour Yacht Club would decrease private recreational opportunities and the number of private facilities available for social gatherings in Bodega Bay, and would decrease revenue for the Bodega Harbour Homeowners' Association.

Table 14. Highway 1 Area: Bodega Harbour Yacht Club– Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	<i>Bodega Harbour Yacht Club PRIV-1 0.48 acres</i>	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	4%	< 1%
2 - 2030	0.83	25	20-year	8%	34%
3 - 2050	1.67	50	20-year	13%	49%
4 – 2100 Best Case	3.33	100	100-year	48%	60%
5 – 2100 Worst Case	6.56	200	100-year	51%	73%

Residential

The Highway 1 Area contains two urban residential and three resources and rural development areas along the east side of Bodega Bay exposed to sea level rise and storm events (UR-1 to UR-2 and RRD-1 to RRD-3 on **Figure 9a**). **Table 15** shows the number of developed and vacant lots and number of dwelling units which comprise these residential areas.

Table 15. Highway 1 Area: Residential Assets – Lots and Dwelling Units

Asset	Lots	Vacant Lots	Dwelling Units
UR-1	3	0	3
UR-2	13	2	12
RRD-1	2	1	1
RRD-2	2	0	3
RRD-3	1	0	1

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of these residential areas. **Table 16** shows the projected percent area permanently inundated by sea level rise and with storm event flooding. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding of the areas under Scenario 5 (2100 Sea Level Rise Worst Case).

All of these residential areas are projected to be at risk of inundation from sea level rise by 2100.

UR-1. In 2030 less than 1% of the area would be permanently inundated by sea level rise and subject to periodic flooding during storm events. In 2100 under the best case scenario, 28% of the area would be permanently inundated and 31% would be subject to periodic flooding during storm events. Under the worst case scenario, 17% of the area would be permanently inundated and 42% would be subject to periodic flooding.

UR-2. In 2030 5% of the area would be permanently inundated by sea level rise and 9% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 11% of the area would be permanently inundated and 15% would be subject to periodic flooding during storm events. Under the worst case scenario, 13% of the area would be permanently inundated and 21% would be subject to periodic flooding.

RRD-1. In 2030 4% of the area would be permanently inundated by sea level rise and 10% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 13% of the area would be permanently inundated and 17% would be subject to periodic flooding during storm events. Under the worst case scenario, 19% of the area would be permanently inundated and 32% would be subject to periodic flooding.



UR-2

RRD-2. In 2030 7% of the area would be permanently inundated by sea level rise and 11% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 14% of the area would be permanently inundated and 20% would be subject to periodic flooding during storm events. Under the worst case scenario, 22% of the area would be permanently inundated and 30% would be subject to periodic flooding.

RRD-3. In 2030 the area would not be permanently inundated by sea level rise and 12% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 14% of the area would be permanently inundated and 16% would be subject to periodic flooding during storm events. Under the worst case scenario, 17% of the area would be permanently inundated and 24% would be subject to periodic flooding.

Permanent inundation of all or a portion of these residential properties would result in the loss of residential land area to bay waters.

UR-1. Permanent inundation from sea level rise would affect one property, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the property and residence, decreasing the buffer between them, which could result in inundation of the residence.

UR-2. Permanent inundation from sea level rise would affect six developed properties, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the properties and residences, decreasing the buffer between them, which could result in inundation of six residences. Permanent inundation of the two vacant properties would result in loss of property frontage, hence the size of the useable area.

RRD-1. Permanent inundation from sea level rise would affect two properties, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the residences, which could result in inundation of one residence.

RRD-2. Permanent inundation from sea level rise would affect two properties, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the two duplexes, which could result in inundation of the duplexes.

RRD-3. Permanent inundation from sea level rise would affect one property, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the residence, which could result in inundation of the residence.

Table 16. Highway 1 Area: Residential Assets – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	<i>UR-1</i> 0.46 acres		<i>UR-2</i> 1.47 acres		<i>RRD-1</i> 0.5 acres		<i>RRD-2</i> 0.10 acres		<i>RRD-3</i> 0.07 acres	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----	2%	2%	< 1%	3%	4%	3%	----	----
2 - 2030	0.83	25	20-year	< 1%	< 1%	5%	9%	4%	10%	7%	11%	----	12%
3 - 2050	1.67	50	20-year	< 1%	28%	7%	11%	6%	13%	8%	14%	6%	14%
4 – 2100 Best Case	3.33	100	100-year	28%	31%	11%	15%	13%	17%	14%	20%	14%	16%
5 – 2100 Worst Case	6.56	200	100-year	17%*	42%	13%	21%	19%	32%	22%	30%	17%	24%

* Decrease in permanent inundation under an increase in sea level rise is likely due to a small circulation change that occurs as a result of the higher sea-level and its interaction with flood water (Maya Hayden, Point Blue Conservation Science, personal communication, 2017)

Summary – Highway 1 Area

Potential Impacts

Table 17 summarizes the projected percent of Highway 1 Area assets permanently inundated by sea level rise in 2100 under the best and worst case scenarios.

By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 9% to 70% of commercial areas, 51% of the Bodega Harbour Yacht Club, 13% to 22% of residential areas, and 2% of a public access and recreation area (Dredge Spoil Disposal Ponds Site).

Table 17. Highway 1 Area: Summary of Projected Percent Area of Assets Permanently Inundated by Sea Level Rise by 2100

Asset	Best Case Scenario	Worst Case Scenario
Coastal Wetlands		
FWMARSH-1	----	----
FWMARSH-2	----	----
FWMARSH-3	----	----
Public Access and Recreation		
Dredge Spoil Disposal Ponds Site	2%	2%
County Regional Parks Trails	N/A	N/A
California Coastal Trail	N/A	N/A
Public Utility		
Bodega Bay PUD Wastewater Treatment Plant	----	----
Commercial		
COM-1	10%	9%
COM-2	39%	70%
COM-3	12%	69%
COM-4	18%	34%
Private Recreation		
Bodega Harbour Yacht Club	48%	51%

Asset	Best Case Scenario	Worst Case Scenario
Residential		
UR-1	28%	17%
UR-2	11%	13%
RRD-1	13%	19%
RRD-2	14%	22%
RRD-3	14%	17%

Potential Adaptation Strategies

Possible adaptation strategies for the Highway 1 Area are accommodate and retreat. Accommodate strategies employ methods that modify existing development to decrease hazard risks and increase resiliency. Because most of the residential and commercial structures have been built on piling, maintenance of these pilings will be necessary as wave and tidal scours undermine footings over time. Some buildings may need to be incrementally relocated and in-water structures removed. Relocation of the wastewater treatment plant would have to comply with Coastal Act policy (Section 30231) to minimize adverse effects of wastewater discharges and entrainment.

Highway 1 Area adaptation priorities include: (1) potentially accommodate sea level rise through redevelopment and maintenance strategies, (2) protect or increase adaptive capacity of shoreline roads and trail access, and (3) consider relocating the wastewater treatment plant.

County Regional Parks Area

The County Regional Parks Area is the west and south bay, encompassing the area from Westside Regional Park south to the tip of Sonoma Coast State Park, east across Bodega Harbor, across Doran Beach Regional Park, to where it meets the Highway 1 Area at the western edge of the Bodega Harbour Subdivision and Golf Course. The County Regional Parks Area includes all of the Institutional and most of the Public Access & Recreation (County Regional Parks) assets in Bodega Bay. Additional County Regional Parks Area assets include Private Recreation, Trails, and Coastal Wetlands. **Figure 10a** shows the location of and number assigned to each asset.

The assets most vulnerable to sea level rise and storm events in the County Regional Parks Area are Westshore Road, Westside Regional Park, and Doran Beach Regional Park.

Westshore Road is a critical north-south access route that originates in the north harbor and terminates at the Bodega Head trailhead. Sea level rise inundation would substantially affect access to and along Westshore Road. West Bodega Harbor residents and U.C. Davis Bodega Marine Laboratory personnel depend on Westshore Road for access to homes and research facilities/employment. County residents and tourists depend on Westshore Road for access to Westside Regional Park. Potential adaptation measures include relocation of the road alignment or elevating the road.

Westside and Doran Beach Regional Parks combined provide recreational and commercial boat launches, campsites, day use areas, picnic areas, and parking. Sea level rise inundation would



Doran Beach

affect almost the entire Westside Regional Park and almost 40 percent of Doran Beach Regional Park. Parkland and facilities would be lost or damaged, substantially reducing the available recreational opportunities and the Bodega Bay tourism economy.

Bodega Harbor's inlet is a 100-foot wide channel protected by two rubble mounded jetties built by the U.S. Army Corps of Engineers in 1943. The north jetty is 1,130 feet long, and the south jetty is 1,650 feet long. The north jetty is perpendicular to Doran Beach on the bay side. It may disrupt shoreline currents by reflecting wave energy back

towards the beach, exacerbating sand loss between the north jetty and the beach. Sea level rise will increase the frequency of waves overtopping the jetties, which can erode and weaken the structures.

Doran Beach is a two-mile long dune spit that separates Bodega Harbor from Bodega Bay. Its high sand dunes protect the inner harbor by absorbing wave energy. Normally dunes migrate inland on uninhabited shoreline. However, water surrounds Doran Beach on both sides,

increasing erosion potential and reducing the habitat's resiliency to exposure. Sea level rise increases wave height and volume, which would accelerate erosion of these protective dunes.

The sections below provide information on the percentage area of each asset that would be inundated or flooded as a result of sea level rise and storm events and potential impacts.

Coastal Wetlands

The County Regional Parks Area contains three types of coastal wetlands exposed to sea level rise and storm events: (1) Coastal Freshwater Marsh, Coastal Brackish Marsh, and (3) Bodega Harbor Tidal Mudflat.

Coastal Freshwater Marsh

Coastal Freshwater Marsh occurs in three locations: (1) west of Westside Regional Park (FWMARSH-1 on **Figure 10a**); (2) south of Westside Regional Park, west of Westshore Road (FWMARSH-2); and (3) south of FWMARSH-2 (FWMARSH-3).

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Coastal Freshwater Marsh. **Table 18** shows the projected percent of marsh area permanently inundated by sea level rise and with storm event flooding. **Figure 10b** illustrates the projected permanent inundation, and **Figure 10c** illustrates the projected permanent inundation with storm event flooding of Coastal Freshwater Marsh under Scenario 5 (2100 Sea Level Rise Worst Case).

FWMARSH-1 and FWMARSH-2 are projected to be at risk of permanent inundation from sea level rise by 2100.

FWMARSH-1. In 2030 the marsh would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. In 2100 under the best case scenario, less than 1% of the marsh would be permanently inundated and 3% would be subject to periodic flooding during storm events. Under the worst case scenario, 35% of the marsh would be permanently inundated and 76% would be subject to periodic flooding.

FWMARSH-2. In 2030 and in 2100 under the best case scenario, the marsh would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. Under the worst case scenario, 20% of the marsh would be permanently inundated and 37% would be subject to periodic flooding.

Table 18. County Regional Parks Area: Coastal Freshwater Marsh – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	FWMARSH-1 42.26 acres		FWMARSH-2 8.74 acres		FWMARSH-3 1.1 acres	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----	----	----	----	----
2 - 2030	0.83	25	20-year	----	----	----	----	----	----
3 - 2050	1.67	50	20-year	----	<1%	----	----	----	----
4 – 2100 Best Case	3.33	100	100-year	<1%	3%	----	----	----	----
5 – 2100 Worst Case	6.56	200	100-year	35%	76%	20%	37%	----	----

Coastal Brackish Marsh

Coastal Brackish Marsh occurs in both the Highway 1 and County Regional Parks Areas, but mainly in the County Regional Parks Area, at the following location: north and south of the Dredge Spoil Disposal Ponds Site and south of the Bodega Bay PUD Wastewater Treatment Plant; west of the Bodega Harbour Subdivision and within and west of the Links at Bodega Harbour Golf Course; and along the northern boundary of Doran Beach Regional Park (BRMARSH-1 on **Figure 10a**).

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Coastal Brackish Marsh. **Table 19** shows the projected percent of marsh area permanently inundated by sea level rise and with storm event flooding. **Figure 10b** illustrates the projected permanent inundation, and **Figure 10c** illustrates the projected permanent inundation with storm event flooding of Coastal Brackish Marsh under Scenario 5 (2100 Sea Level Rise Worst Case).

BRMARSH-1 is currently at risk of permanent inundation from sea level rise. In 2030 32% of the marsh would be permanently inundated by sea level rise and 70% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, less than 72% of the marsh would be permanently inundated and 74% would be subject to periodic flooding during storm events. Under the worst case scenario, 73% of the marsh would be permanently inundated and 78% would be subject to periodic flooding.

See Coastal Freshwater Marsh – Inundation and Flood Impacts under the Bodega Harbor Area.

Table 19. County Regional Parks Area: Coastal Brackish Marsh – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	<i>BRMARSH-1</i> 69.56 acres	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	21%	32%
2 - 2030	0.83	25	20-year	32%	70%
3 - 2050	1.67	50	20-year	61%	71%
4 – 2100 Best Case	3.33	100	100-year	72%	74%
5 – 2100 Worst Case	6.56	200	100-year	73%	78%

Bodega Harbor Tidal Mudflat

Bodega Harbor Tidal Mudflat occurs in both the Highway 1 and County Regional Parks Areas, but mainly in the County Regional Parks Area in four locations: (1) along the west side of Bodega Bay, west of the main bay channel, from Westside Regional Park south to the first turnout off Westshore north of the access to Bodega Head (134.48 acres; TIDFLT-1 on **Figure 10a**); (2) east of the main bay channel, along and north of Doran Beach Regional Park, and west of the Dredge Spoil Disposal Ponds Site and COM-5 (278.70 acres; TIDFLT-2); (3) east of the Bodega Head turnout and parking area along Campbell Cove State Beach (5.57 acres; TIDFLAT-3); and (4) west of the Links at Bodega Harbour Golf Course north of Doran Beach Road (6.42 acres; TIDFLAT-4).

Potential Inundation and Flood Impacts

Data on projected permanent inundation and storm event flooding of Bodega Harbor Tidal Mudflat is not available.

See Bodega Harbor Tidal Mudflat - Potential Inundation and Flood Impacts under the Bodega Harbor Area.

Public Access & Recreation – Parks and Trails

County Regional Parks

The County Regional Parks Area contains the only Sonoma County Regional Parks in Bodega Bay – Westside Regional Park (PUBACC-1 on **Figure 10a**) and Doran Beach Regional Park (PUBACC-2).

Westside Regional Park. Westside Regional Park features campsites and boat launch facilities. Amenities include 47 RV and tent campsites, 76 boat trailer and 31 day use parking spaces, three boat and kayak launch lanes, docks and gangway, fish-cleaning and boat rinsing stations, day use picnic area, and RV dump station.

Doran Beach Regional Park. Doran Beach Regional Park has a wide, 2-mile stretch of beach on Bodega Bay and is ideal for walking, picnicking, playing in the sand, flying kites, surfing, and bird-watching. Over 120 tent and RV campsites are available. A boat launch provides access to Bodega Harbor for sport fishing, kayaking, stand-up paddling, and kite surfing. A jetty at the harbor mouth is a popular spot for rock fishing and exploring sea life.



Doran Beach Regional Park

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Westside Regional Park and Doran Beach Regional Park. The Regional Parks assets analyzed comprise landside facilities only and do not include piers or docks. **Table 20** shows the projected percent area of the Regional Parks permanently inundated by sea level rise and with storm event flooding. **Figure 10c** illustrates the projected permanent inundation, and **Figure 10b** illustrates the

projected permanent inundation with storm event flooding of the Regional Parks under Scenario 5 (2100 Sea Level Rise Worst Case).

Westside Regional Park is projected to be more at risk than Doran Regional Park of permanent inundation from sea level rise by 2100.

Westside Regional Park. In 2030 the park would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. In 2100 under the best case scenario, less than 1% of the park would be permanently inundated and 83% would be subject to periodic flooding during storm events. Under the worst case scenario, 98% of the park would be permanently inundated and 100% would be subject to periodic flooding. Permanent inundation would affect almost the entire park, resulting in the loss of recreational land area and many Bodega Bay recreational amenities, including RV and tent campsites and parking. The loss of these recreational amenities would result in a decrease in tourism to Bodega Bay and the loss of tourist revenue.

Doran Beach Regional Park. In 2030 7% of the area would be permanently inundated by sea level rise and 17% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 19% of the area would be permanently inundated and 35% would be subject to periodic flooding during storm events. Under the worst case scenario, 36% of the area would be permanently inundated and 75% would be subject to periodic flooding. Permanent inundation of the park would result in loss of the following recreational amenities: (1) entire Doran Beach, (2) Jetty Day Use Area, (3) Miwok Tent Campground, and (4) Boat Launch & Parking.



Doran Beach Regional Park – Jetty Campground



Westside Regional Park

Table 20. County Regional Parks Area: Regional Parks – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	<i>Westside Regional Park (PUBBACC-1)</i> 12.54 acres		<i>Doran Beach Regional Park (PUBACC-2)</i> 102.51 acres	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----	< 1%	8%
2 - 2030	0.83	25	20-year	----	----	7%	17%
3 - 2050	1.67	50	20-year	----	2%	12%	20%
4 – 2100 Best Case	3.33	100	100-year	< 1%	83%	19%	35%
5 – 2100 Worst Case	6.56	200	100-year	98%	100%	36%	75%

Permanent inundation would also affect a portion of, or bring sea level closer to, the following facilities, decreasing their buffer from sea level rise: (1) Jetty Campground; (2) Cove, Gull, and Shell Campgrounds; (3) Cypress Day Use Area; and (4) day use parking areas. It would also render eastern and western segments of Doran Beach Road permanently impassible. The above impacts of temporary flooding and permanent inundation could result in temporary or permanent closure of Doran Beach Regional Park. Temporary or permanent closure of the park would result in loss of a significant recreational opportunity in Bodega Bay, and a decrease in tourism and loss of tourist revenue.

Trails

The County Regional Parks Area includes sections of four segments of the California Coastal Trail: (1) an Existing Coastal Trail segment at the Cheney Creek Trail (0.2 miles, 1,261 feet), (2) an Existing Coastal Trail along Doran Beach Regional Park Beach (1.8 miles, 9,504 feet), (3) an Existing Coastal Trail segment on the coast south of Doran Beach Regional Park Beach (0.8 miles, 4,475 feet), and (4) a Future Coastal Trail segment from Doran Beach Regional Park to Sonoma Coast State Beach (1.1 miles, 5,987 feet). **Figure 6** shows the locations of Coastal Trail segments.

Potential Inundation and Flood Impacts

Sea level rise and storm events may result in inundation and would result in flooding of the County Coastal Trail segments. **Figure 10b** illustrates the projected permanent inundation, and **Figure 10c** illustrates the projected permanent inundation with storm event flooding in the area of the trails under Scenario 5 (2100 Sea Level Rise Worst Case).

Periodic flooding during storm events of an Existing Coastal Trail segment would result in trail damage and disrepair and require temporary closure or routing to an alternative trail section during trail repair or re-construction. Permanent inundation of an Existing Coastal Trail segment would require relocation of the trail section. The level of difficulty in relocating an Existing Coastal Trail segment would depend on the sources of funding and the specific terms of easements with private property owners.

County Roads

The County Regional Parks Area includes two County Roads exposed to sea level rise and storm events – Doran Beach Road and Westshore Road.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Doran Beach and Westshore Roads. **Table 21** shows the projected percent of road alignment permanently inundated by sea level rise and with storm event flooding. **Figure 10a** illustrates the projected permanent inundation, and **Figure 10b** illustrates the projected permanent inundation with storm event flooding of the roads under Scenario 5 (2100 Sea Level Rise Worst Case).

Westshore Road is projected to be more at risk than Doran Beach Road of permanent inundation from sea level rise by 2100.

Doran Beach Road. In 2030 the road would not be permanently inundated by sea level rise and 10% of the road would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 12% of the road would be permanently inundated and 25% would be subject to periodic flooding during storm events. Under the worst case scenario, 26% of the road would be permanently inundated and 68% would be subject to periodic flooding.

Westshore Road. In 2030 the road would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. In 2100 under the best case scenario, 3% of the road would be permanently inundated and 18% would be subject to periodic flooding

during storm events. Under the worst case scenario, 39% of the road would be permanently inundated and 90% would be subject to periodic flooding.

Table 21. County Regional Parks Area: County Roads – Inundation and Flood Projections (Percent of Alignment)

Scenario	Projected Sea Level Rise		Storm Event	Doran Beach Road 9,503.2 feet (1.80 miles)		Westshore Road 9,025.9 feet (1.71 miles)	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----	----	----
2 - 2030	0.83	25	20-year	----	10%	----	----
3 - 2050	1.67	50	20-year	7%	12%	----	5%
4 – 2100 Best Case	3.33	100	100-year	12%	25%	3%	18%
5 – 2100 Worst Case	6.56	200	100-year	26%	68%	39%	90%

See Potential Inundation and Flood Impacts under County Roads in the Bodega Harbor Area. In the County Regional Parks Area, permanent inundation of Westshore Road would affect access to and from Westside Regional Park and the U.C. Davis Marine Laboratory. Permanent inundation of Doran Beach Road would affect access to and from Doran Beach Regional Park.



Westshore Road

Institutional

The County Regional Parks Area includes the only Institutional asset in Bodega Bay – the U.C. Davis Bodega Marine Laboratory (INST-1 on **Figure 10a**). For nearly 50 years, the Bodega Marine Laboratory has provided hands-on training to students who have become leaders in the fields of marine science and policy. Faculty and researchers address a diverse array of basic and applied research problems. An Organized Research Unit of U.C. Davis, the Bodega Marine Laboratory is a specialized facility equipped with a meteorological and oceanographic observation network and long-term data set, Cadet Hand Library, teaching classrooms, wet labs, seawater system, greenhouses, dive training facility, facility-wide animal care and support, Bodega Marine Reserve, housing and conference facilities, and vessel fleet.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in negligible inundation and flooding of the U.C. Davis Bodega Marine Laboratory property. **Table 22** shows the projected percent area of the property permanently inundated by sea level rise and with storm event flooding. **Figure 10b** illustrates the projected permanent inundation, and **Figure 10c** illustrates the projected permanent inundation with storm event flooding of the Marine Laboratory property under Scenario 5 (2100 Sea Level Rise Worst Case).

Table 22. County Regional Parks Area: U.C. Davis Marine Laboratory Property – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	<i>INST-1</i> 274.69 acres	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	< 1%	< 1%
2 - 2030	0.83	25	20-year	< 1%	< 1%
3 - 2050	1.67	50	20-year	< 1%	< 1%
4 – 2100 Best Case	3.33	100	100-year	< 1%	< 1%
5 – 2100 Worst Case	6.56	200	100-year	< 1%	2%

In 2030 and 2100 under the best case scenario, less than 1% of the property would be permanently inundated by sea level rise and subject to periodic flooding during storm events. Under the worst case scenario, less than 1% of the property would be permanently inundated and 2% would be subject to periodic flooding. Under the 2100 worst case scenario, flooding would prevent access to the property entrance off Westshore Road and to Westshore Road itself. While inundation would not prevent access to the property right at the entrance, it would

prevent access to Westshore Road, essentially preventing access to the property. If there is no access to the property, it may become necessary to close the facility. Closure of the U.C. Davis Marine Laboratory would result in the loss of a major marine science and policy training and research facility in California.

Private Recreation

The Links at Bodega Harbour Golf Course is the only Private Recreation asset in the County Regional Parks Area. This analysis addresses only the grounds of the Golf Course exposed to sea level rise and storm events (PRIV-1 on **Figure 10a**).

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of the affected grounds of the Links at Bodega Harbour Golf Course. **Table 23** shows the projected percent area of the affected grounds permanently inundated by sea level rise and with storm event flooding. **Figure 10b** illustrates the projected permanent inundation, and **Figure 10c** illustrates the projected permanent inundation with storm event flooding of the affected grounds under Scenario 5 (2100 Sea Level Rise Worst Case).

In 2030 the grounds would not be permanently inundated by sea level rise, and 6% of the grounds would be subject to periodic flooding during storm events. In 2100 under the best case scenario 9% of the grounds would be permanently inundated and 21% would be subject to periodic flooding during storm events. Under the worst case scenario, 23% of the grounds would be permanently inundated and 40% would be subject to periodic flooding.



Links at Bodega Harbour Golf Course

Table 23. County Regional Parks Area: Links at Bodega Harbour Golf Course (affected grounds) – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	<i>PRIV-1</i> 19.07 acres	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----
2 - 2030	0.83	25	20-year	----	6%
3 - 2050	1.67	50	20-year	----	15%
4 – 2100 Best Case	3.33	100	100-year	9%	21%
5 – 2100 Worst Case	6.56	200	100-year	23%	40%

Permanent inundation and periodic flooding would affect the grounds of three of 18 holes at the Links at Bodega Harbour Golf Course - those located south of Heron Drive and southwest of the Bodega Harbour Clubhouse. Periodic flooding could result in damage and disrepair to the grounds of three holes, which may result in temporary closure of the grounds while they are being repaired or reconstructed. Permanent inundation of the grounds of two holes could result in temporary closure of the grounds while they are being relocated and constructed, or in their permanent closure. Temporary or permanent closure of the grounds for up to three holes at the golf course could decrease tourist attraction to the golf course, hence could decrease revenue for the Bodega Harbour Homeowners' Association.

Summary – County Regional Parks Area

Potential Impacts

Table 24 summarizes the projected percent of County Regional Parks Area assets permanently inundated by sea level rise in 2100 under the best and worst case scenarios.

By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 20% to 73% of coastal wetlands, almost 100% of Westside Regional Park and 36% of Doran Beach Regional Park, 26% to 39% of County Roads, 23% of the Links at Bodega Harbour Golf Course, and less than 1% of the U.C. Davis Bodega Marine Laboratory.

Table 24. Highway 1 Area: Summary of Projected Percent Area of Assets Permanently Inundated by Sea Level Rise by 2100

Asset	Best Case Scenario	Worst Case Scenario
Coastal Wetlands		
FWMARSH -1	<1%	35%
FWMARSH -2	----	20%
FWMARSH -3	----	----
BRMARSH-1	72%	73%
TIDFLT-1	N/A	N/A
TIDFLT-2	N/A	N/A
TIDFLT-3	N/A	N/A
TIDFLT-4	N/A	N/A
Public Access and Recreation		
Westside Regional Park	<1%	98%
Doran Beach Regional Park	19%	36%
California Coastal Trail	N/A	N/A
County Roads		
Doran Beach Road	12%	26%
Westshore Road	3%	39%
Institutional		

Asset	Best Case Scenario	Worst Case Scenario
U.C. Davis Bodega Marine Laboratory	<1%	<1%
Private Recreation		
Links at Bodega Harbour Golf Course	9%	23%

Potential Adaptation Strategies

Possible adaptation strategies for the County Regional Parks Area are accommodate and retreat. Accommodate strategies employ methods that modify existing development to decrease hazard risks and increase resiliency of the development. Sonoma County Regional Parks may consider moving the campgrounds and parking areas upland to a higher elevation. Potential adaptation strategies for Westshore Road are addressed under the Bodega Harbor Area.

County Regional Parks Area adaptation priorities include: (1) potentially accommodate sea level rise through redevelopment, (2) relocate facilities out of hazard areas, and (3) protect beaches through a sand enrichment program.

5. Adaptation Strategies

Introduction

As described in this Focused Vulnerability Assessment, Bodega Bay faces a number of threats from a rising sea and bay. Sea level rise exacerbates existing climate-related hazards such as an increased number of flooding incidents, increased ocean acidification, or bluff erosion and failure. The previous sections of this assessment identify the assets and resources of Bodega Bay vulnerable to sea level rise and coastal storms; and in this section the County considers potential adaptation strategies to prepare for future changes in coastal hazards. Vulnerable assets and resources identified include development and infrastructure; public access and recreational opportunities; beaches, wetlands, and other environmentally sensitive habitat areas; scenic and visual resources; agricultural resources; and water quality.

As the County prepares for these changes, we must evaluate the feasibility of adaptation strategies necessary to protect public safety, health, and quality of life. Such strategies are still developing and evolving, so the County will have to evaluate whether the cost, legal, or permitting constraints for these strategies are manageable. The strategies we present below are not panaceas to protect, accommodate, or retreat the Sonoma County assets impacted by sea level rise. Rather, these strategies are meant to continue our discussion with the community about the suite of possibilities and constraints to consider for climate adaptation starting from the sea level rise adaptation workshop we held in November.

Legal Context for Sea Level Rise Adaptation

The California Coastal Act, the public trust doctrine, California Environmental Quality Act (CEQA), Coastal Zone Management Act, Clean Water Act, Porter Cologne Act, River and Harbors Act, constitutional protections for property, and other laws provide the context for evaluation of appropriate adaptation measures for Bodega Bay. Section 30235 of the Coastal Act states:

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply...

Section 30253(b) requires new development to avoid risk and prohibits new development from in any way requiring the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The Coastal Commission guidance suggests rezoning hazard areas as open space; and anticipating that sea level rise will impact new development, assuring that critical infrastructure will be safe from inundation.

Some of the adaptation strategies may involve the adoption of Local Coastal Plan policies and programs, changes to zoning and building codes, or permit conditions that focus on avoidance and minimization of risks and protection of coastal resources. Other adaptation strategies could build adaptive capacity into projects themselves, thus addressing future changes in hazard risks while ensuring long-term resource protection.

General Adaptation Categories

Adaptation strategies for vulnerable resources or assets fall into three broad categories: protect, accommodate, and retreat. These strategies are reciprocal, and one strategy does not preclude using another later in time. For purposes of implementing the Coastal Act, no single category or specific strategy should be considered the “best” option (California Coastal Commission 2015). Sea Level Rise planning for Bodega Bay includes strategies from multiple adaptation categories, and may be modified over time as science and engineering evolve. Some adaptation strategies may have legal or procedural constraints. For example, in order to construct and maintain coastal armoring, the County would need to work closely with various regional, state, and federal permitting agencies to meet design standards, both for the structures themselves and the adjacent shoreline environment. Adaptive responses will also need to be consistent with the Coastal Act, California Environmental Quality Act, and outside agency permit conditions.

The following paragraphs describe each adaptation strategy and potential areas for implementation in the Bodega Bay community.

Strategies to Protect Assets

Protection strategies generally employ some sort of engineered structure or other measure to defend development or other resources from sea level rise while allowing the resource or asset to remain in its current location. There are two main types of protection strategies: hard and soft defensive measures or armoring. Hard armoring refers to engineered structures such as seawalls, revetments, and bulkheads that defend against coastal hazards such as wave impacts, erosion, and flooding. Armoring is a common response to coastal hazards, but it can result in serious negative impacts to coastal resources, particularly as sea level rises (California Coastal Commission 2015). Soft armoring refers to the use of natural or green infrastructure like beaches, dune systems, wetlands, and other natural systems to buffer coastal areas.

Hard armoring is common along the harbor in Bodega Bay - large rock boulders protect Westshore Road substructure and pavement from tidal erosion and storm surges. The Bodega Harbor Jetty is a rubble mound jetty seawall and another example of a hard protection strategy. Hard structures have an ecological cost since they form barriers that impede the ability of natural beaches and habitats to migrate inland over time. If they are unable to move inland, public recreational beaches, wetlands, and other habitats will be lost as sea level continues to rise. Passive erosion is the narrowing of beaches because the back of the beach on an eroding shoreline is fixed in place (Flick et al. 2012). In Bodega Bay, this occurs on the harbor side of Doran Beach where the back of the beach is lined with large rock boulders. Other detrimental impacts of hard armoring may include negative visual impacts or interference with other ecosystem services (California Coastal Commission 2015).

Soft armor buffering strategies like using wetlands, beach nourishment, dune management or the construction of living shorelines capitalize on the natural ability of these systems to protect coastlines. At the same time, these strategies provide benefits such as habitat enhancement, recreational areas, more pleasing views, and the continuation or enhancement of ecosystem services. The engineering of green infrastructure is a somewhat newer concept, and because of this the effectiveness of some of these strategy types is not well known or tested. In cases where soft armor strategies might not be completely effective or preferred, a hybrid approach

using both hard and soft armoring could be considered. A potential adaptation strategy for Doran Beach would be beach nourishment.

Although the Coastal Act provides for potential protection strategies for existing development, it requires adaptive capacity in new development to prevent altering a natural shoreline (California Coastal Commission 2015). The Coastal Commission recommends prioritizing “hard” or “soft” protection options that enhance and maximize coastal resources and access. Innovative nature-based approaches such as living shoreline techniques or managed/planned retreat should be considered in Sonoma County.

Strategies to Accommodate Sea Level Rise

Accommodation strategies employ methods that design or modify developments to decrease hazard risks and thus increase the resiliency of developments to the impacts of sea level rise. Accommodation strategies include actions such as elevating structures, retrofits and/or the use of materials meant to increase the strength of development, building structures that can easily be moved and relocated, or using extra setbacks. Sonoma County Regional Parks’ Doran Beach and Westside Regional Parks boat launches use floating docks that will fall and rise with the tides and rising harbor water levels.

On a community scale, accommodation strategies could include zoning ordinances for redevelopment actions that will help support the resiliency of the built environment. For example, the County could create a combining district for vulnerable areas that would setback development from bluffs or beaches. Strategies to accommodate sea level rise seek to prevent exposure by clustering development in less vulnerable areas.

As with protection strategies, some accommodation strategies could result in negative impacts to coastal resources. For example, redevelopment such as elevating structures may block coastal views and degrade community character and beach ambience. Pile-supported structures could erode into a form of shoreline protection that interferes with coastal processes, blocks beach and trail access, and deters from the scenic character of the bay. Pile-supported structures that occur on the southside of Highway 1 will accommodate sea level rise, but may require reinforcing due to scour.

Strategies to Retreat from Sea Level Rise

Retreat strategies are those that relocate or remove existing development out of hazard areas and limit the construction of new development within vulnerable areas. These strategies include providing land use designations and zoning to encourage building in more resilient areas, or gradually removing and relocating existing development. Acquisition and buyout programs, transfer of development credits programs, and removal of structures (i.e., after reasonable amortization periods) are examples of strategies designed to encourage managed retreat.

Potential Adaption Strategies for Bodega Bay

In this section, the County cautiously applied the general adaptation categories defined above to vulnerable assets to help increase resilience to sea level rise. These potential strategies may change over time as science and engineering evolve. The County will refine these potential adaptation strategies during the development of Local Coastal Plan programs and policies for

the diverse geography and conditions of the Sonoma Coast. For this focused vulnerability assessment, the adaptation strategies focus on Bodega Bay.

Sonoma County hosted a Sea Level Rise Adaptation Planning Workshop for the community of Bodega Bay on November 29, 2016 at the U. C. Davis Bodega Bay Marine Laboratory. The County provided members of the community with a presentation of the three broad categories of strategies for adaptation, along with examples of how and where different adaptation strategies might be used. County staff requested that the community consider implementation locations for adaptation measures by marking aerial photomaps of Bodega Bay. The County incorporated these suggestions into the adaptation strategies discussion for each Bodega Bay area below.

Bodega Harbor Area

Assets vulnerable to sea level rise and storms in the Bodega Harbor Area include: Westshore, Eastshore, and Bay Flat Roads; public and private marinas; residential development; and coastal habitats. Anticipated impacts include road substructure and pavement degradation, ditches clogged with excess sediment, and the possibility of saltwater contaminating private wells and coastal freshwater habitats.

Possible adaptation strategies for Bodega Harbor fall into the categories of retreat and protect. The retreat strategy includes avoiding new development, redeveloping vulnerable infrastructure, and removing damaged infrastructure in hazard areas. Protecting vulnerable road infrastructure in the near to mid-term is anticipated until a long-term relocation strategy has been determined. The measures below combine suggestions from the community and guidance from the Coastal Commission.

Land Use Adaptation Strategies

Bodega Harbor Area Priorities: Avoid new development within mapped hazard areas, protect or relocate shoreline roads and access, remove boats and infrastructure that may damage or degrade harbor water quality, and increase culvert and roadside ditch capacity.

Retreat:

- **Consider avoiding new development in hazardous areas:** avoid construction of new development in zones or overlay areas identified or designated as hazardous due to potential flooding and inundation.
- **Determine the feasibility of a “Transfer of Development Credit” program (TDC):** Restrict development in one area (“sending area”) and allow for the transfer of development credits to another area more appropriate for intensive use (“receiving area”). Local Coastal Plans can establish policies to implement a TDC program to restrict development in areas vulnerable to sea level rise and allow for transfer of development credits to parcels with less vulnerability to hazards. A TDC program can encourage the relocation of development away from at-risk locations, and may be used in combination with a buy-out program.

- **Consider options for future removal when planning and designing new development:** Design options should not place an undue burden on future property owners or coastal resources. For new development in high hazard areas or resource-constrained areas, ensure that foundation designs or other aspects of the development will not preclude future incremental relocation or managed retreat. Certain foundation and building elements such as deep perimeter foundations may be difficult to remove in the future, thus alternative design options should be considered.
- **Consider developing a plan to remove or relocate structures that become threatened:** This measure would require authorization through a Coastal Development Permit for removal or relocation of new development vulnerable to wave action, erosion, or other hazards should it become threatened in the future.
- **Consider developing a plan to remove or relocate existing structures that become threatened:** This measure would require authorization through a Coastal Development Permit for removal or relocation of redevelopment subject to wave action, erosion, or other hazards should it become threatened in the future.
- **Consider developing a boat abatement program:** Sea level rise and coastal storms may result in the sinking, breaking apart, or washing ashore of boats abandoned in Bodega Harbor. This program would prevent abandoned, unregistered boats moored at Sonoma County Regional Parks and marinas from contaminating the harbor or damaging other infrastructure; and would include evaluating and enforcing anchorage rules.
- **Plan and design transportation systems to accommodate anticipated sea level rise impacts:** Ensure that transportation networks are designed to function even if the highest projected sea level rise occurs. Efforts to realign, retrofit, and/or protect infrastructure should be coordinated with Caltrans, local public works/transportation agencies, and coastal planning efforts. Individual transportation projects would be implemented through Coastal Development Permits.
- **Consider retrofitting existing transportation infrastructure as necessary:** In instances where relocation of existing transportation infrastructure is not an option, repair the damage and/or retrofit the existing structures to better withstand sea level rise impacts. For example, use stronger materials, elevate bridges or sections of roadway, and build larger or additional drainage systems to address flooding concerns.
- **Attempt to build redundancy into the transportation system:** Provide alternate routes, as possible, to allow for access to and along the coast for instances in which sections of roadways may become temporarily impassible as a result of coastal hazards. Ensure that alternate route information is provided to residents and visitors to coastal areas.

Protect:

- **Evaluate locations for hard protection use only if allowable and if no feasible less damaging alternative exists:** "Hard" coastal protection is a broad term for most engineered features such as seawalls, revetments, cave fills, and bulkheads that block the landward retreat of the shoreline. In some cases, caissons and pilings may also be

considered hard shoreline protective devices. Due to adverse effects on shoreline sand supply and beach area available for public use, such protective devices should be avoided where feasible. Under current law, shoreline protection for existing structures in danger from erosion may be allowed if coastal resource impacts are avoided or minimized and mitigated.

- **Potentially survey and determine feasibility of retaining existing shoreline protection:** Westshore Road, Highway 1, and Bayflat Road run along developed shoreline with no or limited alternate routes. The structural integrity of existing armoring along these roads should be determined, and potential long-term strategies for road resiliency to sea level rise should be considered.
- **Consider increasing capacity of stormwater infrastructure:** Actions to reduce impacts from higher water levels could include widening drainage ditches, improving carrying and storage capacity of tidally-influenced streams, installing larger pipes and culverts, adding pumps, converting culverts to bridges, creating retention and detention basins, and developing contingency plans for extreme storm events. Encouraging and supporting these types of efforts upstream may also be important.

Highway 1 Area

The assets vulnerable to sea level rise and storms in the Highway 1 Area include Highway 1, residential and commercial buildings on the harbor side of Highway 1, yacht club, wastewater treatment plant, Regional Parks and California Coastal Trails access, and environmentally sensitive habitat areas. Soldier pile walls and hard armoring reinforce the low-lying areas of Highway 1. Residential and commercial buildings on the harbor side of Highway 1 are more vulnerable to storm surges, kind tide inundation, and sea level rise. Some of the buildings have been elevated on wooden pilings, which require maintenance.

The adaptation strategies to consider for these assets are based on accommodate and retreat. Accommodate strategies employ methods that modify existing developments to decrease hazard risks and increase resiliency of the development. Because most of the residential and commercial structures have been built on pilings already, maintenance of these pilings will be necessary as wave and tidal scours undermine footings over time. Some buildings may need to be incrementally relocated and in-water structures removed. Relocation of the wastewater treatment plant would be required to follow Coastal Act policy (Section 30231) to minimize the adverse effects of wastewater discharges and entrainment.

Land Use Adaptation Strategies

Highway 1 Area Priorities: Potentially accommodate sea level rise through redevelopment and maintenance strategies, protect or increase adaptive capacity of shoreline roads and trail access, determine wastewater treatment plant resiliency.

Accommodate:

- **Consider revising setbacks for new development:** Ensure structures (especially wells and septic systems) are set back far enough inland from the beach or bluff edge such that they will not be endangered by erosion (including sea level rise induced

erosion) over the life of the structure, without the use of a shoreline protective device. When used to address future risk, setbacks are normally defined by a measurable distance from an identifiable location such as a bluff edge, line of vegetation, dune crest, or roadway.

- **Examine non-conforming structure policies and definitions:** Consider developing policies and regulations to define development in the area between the sea and the first coastal roadway or other known hazard zones as non-conforming, in order to avoid perpetuating development that may become at risk.
- **Consider policies for the gradual phase out of uses in hazardous areas subject to future sea level rise:** Over time, sea level rise is going to create hazardous or harmful conditions that will make some uses unworkable. In some cases it will be difficult or not feasible to mitigate impacts of sea level rise. In these cases, the County will consider policies to phase out existing uses in high hazard or emerging nuisance areas over time. Consider the adoption of policies, including phase out times, for amortization of the uses. Until an amortization schedule is adopted, existing uses that become non-conforming will be allowed to remain for their economic life, but would not be allowed to be rebuilt.
- **Scrutinize redevelopment or upgrades to existing structures in at risk locations:** Use redevelopment policies or regulations to limit expansions, additions, or substantial renovations of existing structures in danger from erosion. Require removal of non-conforming portions of the existing structure, when possible, when a remodel or renovation is proposed.
- **Evaluate redevelopment of existing structures and encourage use of current standards.** Use Local Coastal Plans and CDPs to require that renovations meeting the threshold for redevelopment not be approved unless the entire structure meets the standards for new development, including but not limited to a waiver of right to protection. Specify that if any existing non-conforming elements are permitted to remain, those non-conforming elements are not subject to rights to protection pursuant to Coastal Act Section 30235. Consider limiting cumulative improvement or additions to existing structures:
- **Consider retrofitting existing transportation infrastructure as necessary:** In instances where relocation is not an option, repair damage and/or retrofit existing structures to better withstand sea level rise impacts. For example, use stronger materials, elevate bridges or sections of roadways, and build larger or additional drainage systems to address flooding concerns.
- **Consider developing ecological buffer zones and/or increase the size of buffers:** Buffer zones are intended to protect sensitive habitats from the adverse impacts of development and human disturbance. An important aspect of buffers is that they are distinct ecologically from the habitat they are designed to protect. Local Coastal Plans can establish requirements for ecological buffers and provide guidance on how to establish or adjust these buffers to accommodate sea level rise. Coastal Permits should require buffers to be designed, where applicable, to provide "habitat migration corridors" that allow sensitive habitats and species to migrate inland or upland as sea level rises.

- **Carefully consider siting and design of wastewater disposal systems to avoid risks from sea level rise:** Wastewater treatment and disposal systems are particularly challenging in that they are often located in areas that will be impacted by sea level rise. Damage to these facilities could result in impacts to water quality or other coastal resources. New facilities should not be sited in hazardous areas. Existing facilities already located within hazardous areas should be modified to withstand worst-case scenario sea level rise impacts.
- **Encourage siting and design wastewater disposal systems to avoid risks from sea level rise:** Wastewater treatment and disposal systems are particularly challenging in that they are often located in areas that will be impacted by sea level rise. Ensure that these systems are not adversely affected by the impacts of sea level rise over the full life of the structure and ensure that damage to these facilities would not result in impacts to water quality or other coastal resources. Avoid locating new facilities in hazardous areas if possible. If complete avoidance is not possible, minimize elements of the system that are in hazardous areas (for example, locate the main facility on higher ground and only place pump stations in potentially hazardous areas), and design any facilities in hazardous areas to withstand worst-case scenario sea level rise impacts.
- **Evaluate water quality risks from wastewater treatment plants, septic systems, and ocean outfalls:** Consider conducting a feasibility study of wastewater treatment plant operations, berm stability, and emergency operations. Consider establishing a program to retrofit, decommission, relocate, or eliminate ocean outfalls and other wastewater infrastructure deemed at risk. Alternatives include modifications to outfall lines, the use of green infrastructure, and redesign of waste and stormwater systems.
- **Identify research and monitoring needs to more precisely understand local issues:** Research programs may be established to analyze the particular local challenges related to water quality and supply as a result of sea level rise. Opportunities for innovative solutions to these challenges should be identified.

Retreat:

- **Consider avoiding the expansion or perpetuation of existing structures in at-risk locations:** On an eroding shoreline, the seaward portions of an existing structure may become threatened as the setback or buffer zone between the structure and the mean high tide line or bluff edge is reduced due to erosion of the beach or bluff. When the seaward portion of the structure no longer meets the standards or setback that would be required for new development, it becomes a “non-conforming” structure for purposes of redevelopment policies and regulations. The following should be considered, as consistent with the Coastal Act, FEMA policies, and other relevant standards, to address existing non-conforming development to avoid the need for shoreline or bluff protective devices and associated impacts to coastal resources.
- **Consider retrofitting or relocating vertical accessways:** Consider options to retrofit existing accessways to reduce impacts from sea level rise. Such retrofits could include using different materials that can better withstand impacts, or re-orienting the

layout or other features of accessways to lessen damage and other impacts. Also begin to plan for and identify triggers and options for relocating accessways over time as conditions change.

- **Evaluate the potential of retrofitting or relocating sections of the Coastal Trail:** Use boardwalks, bridges, and/or other design features to ensure continuity of the California Coastal Trail (Coastal Trail) in sections that are vulnerable to sea level rise hazards. Some sections may need to be relocated over time. A Local Coastal Plan could identify vulnerable sections of the Coastal Trail and establish a phased approach to relocate sections of the trail in such a way that is consistent with provisions of the Coastal Act and ensures that the Coastal Trail remains within sight, sound, or smell of the sea.
- **Determine the feasibility of establishing conservation easements or other development restrictions to protect habitat:** Establish a formalized program to identify, acquire, and manage areas appropriate for some form of conservation protection. Easements or other strategies may be used to limit or restrict development on portions of a lot parcel that are most vulnerable to sea level rise impacts. The program might develop standard agreements to be used for easements and identify the entities that could hold the easements. A conservation easement program could be established on a community wide basis through a Local Coastal Plan and implemented on a parcel by parcel basis through individual Coastal Permits.
- **Encourage open space protection as a component of new development located adjacent to coastal habitats:** The Local Coastal Plan can require permit conditions for new development in certain areas that buffers around natural resource areas be protected through a conservation easement, deed restrictions, or other comparable mechanism.
- **Identify opportunities for Regional Sediment Management:** Sediment supplies will be important for the long-term sustainability of many beaches and wetland areas. Strategies to maintain or restore natural sediment supplies and to coordinate sediment removal efforts with opportunities for reuse can provide multiple benefits to coastal ecosystems. See Strategy A.19c above for more detail on RSM programs.

County Regional Parks Area

The assets most vulnerable to sea level rise and storms are Westshore Road, Doran Beach, and Westside Regional Parks, and the inlet to Bodega Harbor. Sea level rise inundation would affect access to and along Westshore Road. Permanent sea level rise inundation would affect almost all of Westside Regional Park facilities including parking and campgrounds by 2100. Doran Beach Regional Park will have permanent inundation of up to 35 percent of the beach and campground by 2100.

The adaptation strategies to consider for these assets are accommodate and retreat. Accommodate strategies employ methods that modify existing developments to decrease hazard risks and increase resiliency of the development. Sonoma County Regional Parks may consider moving the campgrounds and parking areas higher upland. Potential adaptation strategies for Westshore Road have been discussed in the Bodega Harbor Area section.

Land Use Adaptation Strategies

County Regional Parks Area Priorities: Potentially accommodate sea level rise through redevelopment, relocate facilities out of hazard areas, and protect beaches through a sand enrichment program.

Accommodate:

- **Consider long-term hazards in site design for access sites and facilities to minimize impacts:** May include policies that encourage public access sites, segments of the CCT, and recreation and visitor-serving facilities to be sited and designed to avoid impacts from sea level rise, while maximizing public access and recreation opportunities. Examples of siting and design standards for development can be found in section A. Where facilities can be safely sited for the near term but future impacts are likely, require an adaptive management plan detailing steps for maintenance, retrofitting, and/or relocation.
- **Consider protecting existing Parks and Open Space adjacent to the coast:** Plan for future coastal recreational space and parkland by protecting open space adjacent to coastal habitats so that beaches and other habitats can migrate or so that there is open space available as parkland or other areas are lost.
- **Support research on impacts to recreation and public access:** Changes in sea level will affect wave conditions and sediment transport, but additional research is needed to understand how these changes will affect specific conditions for surfing and other recreation activities. While such research programs may be outside the scope of individual local jurisdictions, statements of support for the local issues that need to be addressed can help guide research agendas at the regional state or federal level. Or, such needs can serve to guide grant applications to undertake the needed projects within a jurisdiction. To the extent possible, add policies to promote research on sea level rise impacts to recreational activities like surfing or other coastal recreational uses in the Local Coastal Plan jurisdiction.

Retreat:

- **Consider the feasibility of retrofit or relocate recreation and visitor-serving facilities:** Consider options to retrofit existing recreation and visitor-serving facilities to better accommodate sea level rise impacts. Such retrofits could include use of different building materials and/or relocating facilities.

Protect:

- **Consider incorporating sea level rise into a comprehensive beach management strategy:** Potentially develop a new comprehensive beach management strategy to address loss of beach areas, including loss of lateral access, or changes in beach management due to sea level rise. Establish a program to minimize loss of beach area through, as may be appropriate, a beach nourishment program; restoring sand and sediment supply to the littoral cell; removal, adjustments, or maintenance to shoreline

protection structures; use of man-made structures such as terminal groins or artificial reefs to retain sediment; or other actions.

- **Determine the feasibility of establishing a beach nourishment program and protocols:** The County may need to develop new policies to address the need for beach nourishment with sea level rise. Policies within a Local Coastal Plan may identify locations where nourishment may be appropriate or ecologically feasible. Beach nourishment programs should also consider how nourishment options may need to change over time as sea level rises.
- **Determine the feasibility of establishing management actions to maintain and restore dunes and natural dune processes.** Dunes provide buffers against erosion and flooding by trapping windblown sand, storing excess beach sand, and protecting inland areas, and they provide habitat. Doran Beach is a sand spit with dune habitat that provides wind protection to the inner Harbor, and is a sensitive ecosystem. The County would have to determine the ecological feasibility of this adaptation strategy. This is likely most effective for areas with some existing dune habitat and where there is sufficient space to expand a foredune beach for sand exchange between the more active (beach) and stable (dune) parts of the ecosystem. This strategy requires incremental amounts of sand due to increased erosion from sea level rise.

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7. Glossary

Land Use Categories

Marine Industrial (MI). Land designated for or occupied by marine industrial development. The MI land use category encompasses land to accommodate a variety of commercial, light to medium industrial, and service uses which support the commercial fishing and other coastal dependent industries which depend on the marine environment and resources.

Rural Residential (RR). Land designated for very low density residential development (1 to 20 acres per dwelling unit) which has few if any public services but which has access to county maintained roads.

Urban Residential (UR). Land planned for public services for low and medium density residential development (1 to 6 dwelling units per acre) to accommodate a variety of housing and tenure types.

Resources and Rural Development (RRD). Land designated for very low density residential development and to protect lands needed for use and production of natural resources (e.g., water, timber, geothermal steam, or aggregate production); protect water resources and biotic habitats; and protect from intensive development lands constrained by geologic, flood, or fire hazards or other constraints.

Inundation and Flooding

Permanent Inundation. Permanently covered by water from sea level rise.

Temporary Flooding. Temporarily covered by flood water from storm events.

California Coastal Trail

Existing Coastal Trail. The trail has been constructed.

Proposed Coastal Trail. The approximate location of the trail alignment has been identified as described in the Public Access Plan of the Local Coastal Plan Update.

Future Coastal Trail. The trail alignment between two end points is unknown. In some cases, where the alignment has not been identified, the beginning and end points of the trail are shown and the future alignment is illustrated along State Highway 1.

Coastal Wetlands

Section 30122 of the 1976 California Coastal Act defines wetlands as lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

APPENDIX H: 2010 SONOMA BICYCLE AND PEDESTRIAN PLAN – COASTAL ZONE PROJECTS September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

LIST OF PROJECTS – COASTAL ZONE

Route Segments	Project Area	Supervisory District	Project Number	Bikeway	Begin Point	End Point	Miles	Cost / Mile	Cost Estimate	Notes	Priority
Bean Ave. – Ocean View Ave.	Coast	5	128	Class III	Ocean View Ave.	Sonoma Coast State Beach	0.23	\$5,000	\$1,000	Signs and striping only. Bodega Bay Trail segment B.	MEDIUM
Bodega Ave.	Coast	5	131	Class III	State Hwy. 1	Windy Lane	0.23	\$5,000	\$1,000	Signs and striping only. Bodega Bay Trail segment 3C-1	MEDIUM
Bodega Bay Trail	Coast	5	197E	Class I	Eastshore Rd.	Taylor St.	0.2	\$7,605,000	\$1,521,000	Cost estimate from Bodega Bay Trails Plan feasibility study. Bodega Bay Trail segments 3A, and 3B-1.	HIGH
Bodega Bay Trail	Coast	5	197B	Class I	Harbor View Dr.	State Hwy. 1	0.65	\$400,000	\$259,000	Switch-back section recommended by the Harbor View feasibility study. Bodega Bay Trail segment 3C-2	HIGH
Bodega Bay Trail	Coast	5	197F	Class I	Keefe Ave.	Bay Flat Rd.	1.43	\$400,000	\$572,000	Bodega Bay Trail segments 1B, 1C, and 2B	HIGH
Bodega Bay Trail	Coast	5	197G	Class I	Bay Flat Rd.	Smith Bros. Rd.	0.92	\$2,228,000	\$2,050,000	Cost estimate from Bodega Bay Trails Plan feasibility study. Bodega Bay Trail segments 3D-1 and 3D-2.	HIGH
Bodega Bay Trail	Coast	5	197C	Class I	Lucas Warf/ Smith Bros. Rd.	Doran Beach Rd.	0.66	\$400,000	\$266,000	Bodega Bay Trail segments 5B, 6B, and 6C.	HIGH
Bodega Bay Trail	Coast	5	197A	Class I	State Hwy. 1	Jetty Campground	1.78	\$400,000	\$713,000	Bodega Bay Trail segments I and J	MEDIUM
Coleman Valley Rd.	Coast	5	122	Class III	State Hwy. 1	Bohemian Hwy.	9.54	\$5,000	\$48,000	Signs and striping only.	MEDIUM
Fort Ross Rd.	Coast	5	123	Class III	State Hwy. 1	Cazadero Hwy.	10.59	\$5,000	\$53,000	Signs and striping only.	LOW
Gualala River Bridge Trail	Coast	4	204	Class I	Mendo. Co. Line	Mendo. Co. Line	0.3	\$400,000	\$119,000	Provides connection to Mendocino County via Class I across the Highway 1 Gualala River Bridge.	HIGH
Harbor View Dr.	Coast	5	134	Class III	Bodega Ave.	State Hwy. 1	0.25	\$5,000	\$1,000	Signs and striping only. Bodega Bay Trail segment 3C-2	MEDIUM
Keefe Ave.	Coast	5	130	Class III	Bodega Bay Trail (1B)	Ocean View Ave.	0.12	\$5,000	\$1,000	Signs and striping only. Bodega Bay Trail segment C. Connects Hwy 1 with segment 1B Class I.	MEDIUM
Kruse Ranch Rd.	Coast	5	126	Class III	Seaview Rd.	State Hwy. 1	3.65	\$5,000	\$18,000	Signs and striping only.	LOW
Meyers Grade Rd.	Coast	5	124	Class III	State Hwy. 1	Fort Ross Rd.	4.92	\$5,000	\$25,000	Signs and striping only.	LOW
Ocean View Ave.	Coast	5	129	Class III	Keefe Ave.	State Hwy. 1	0.12	\$ N/A	\$1,000	Connects segments B and C of the Bodega Bay Trail with Hwy 1.	MEDIUM
Smith Brothers Rd.	Coast	5	135	Class III	State Hwy. 1	State Hwy. 1	0.3	\$5,000	\$2,000	Signs and striping only. Bodega Bay Trail segment 5B.	MEDIUM
State Hwy. 1	Coast	5	4E	Class II	Slaughter House Rd.	Doran Beach Rd.	7.23	\$25,000	\$181,000	Adequate right-of-way for Class II. Signs, striping, brush removal, and minor improvements.	HIGH
State Hwy. 1	Coast	5	4F	Class II, Shoulders	Valley Ford Rd.	Slaughter House Rd.	1.49	\$750,000	\$1,119,000	Roadway must be widened and additional right-of-way acquired.	HIGH
State Hwy. 1	Coast	5	4D	Class II, Shoulders	Doran Beach Rd.	State Hwy. 116	11.04	\$750,000	\$8,278,000	Roadway must be widened and additional right-of-way acquired.	HIGH
State Hwy. 1	Coast	5	4G	Class II	Marin Co. Line	Valley Ford Rd.	1.52	\$25,000	\$38,000	Adequate right-of-way for Class II. Signs, striping, brush removal, and minor improvements.	MEDIUM
State Hwy. 1	Coast	5	4C	Class II, Shoulders, Class III	State Hwy. 116	Meyer's Grade Rd.	6.05	\$390,000	\$2,360,000	Class II in climbing lanes, Class III in descending lanes. Roadway must be widened and additional right-of-way acquired.	MEDIUM
State Hwy. 1	Coast	5	4A	Class II, Shoulders, Class III	Kruse Ranch Rd.	Gualala River Bridge	15.47	\$390,000	\$6,034,000	Class II in climbing lanes, Class III in descending lanes. Roadway must be widened and additional right-of-way acquired.	MEDIUM
State Hwy. 1	Coast	5	4B	Class III	Meyer's Grade Rd.	Kruse Ranch Rd.	16.12	\$5,000	\$81,000	Signs and striping only.	MEDIUM
Taylor St.	Coast	5	132	Class III	State Hwy. 1	Bodega Ave.	0.04	\$ N/A	\$1,000	Signs and striping only. Bodega Bay Trail segment 3C-1.	MEDIUM
Windy Lane	Coast	5	133	Class III	State Hwy. 1	Bodega Ave.	0.06	\$ N/A	\$1,000	Signs and striping only. Bodega Bay Trail segment 3C-1.	MEDIUM

PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

APPENDIX I: CATEGORICAL EXCLUSIONS September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX I: CATEGORICAL EXCLUSIONS

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APPENDIX I: CATEGORICAL EXCLUSIONS

1. CATEGORICAL EXCLUSION CONDITIONS FOR UNITS 1, 2, AND 3 IN BODEGA HARBOUR

Note: The following lots in Unit 2 are not exempt from Coastal Permits because of visual concerns:

APNs 100-320-006-008, 014-016, 048-053, 062-066
100-330-033-036

Of these lots, APNs 100-320-051, 053, 066 are subject to Condition 3.

Units 1, 2 and 3 of Bodega Harbour depicted on Exclusion Map B-1 are exempt (except for the lots specified above) from Coastal Permits under certain conditions. All conditions must be met or a Coastal Permit will be required. The Permit and Resource Management Department shall not sign off on any building permit unless evidence is provided that the conditions have been met.

CONDITION 1: (Units 1 and 2 only) All residences must be no higher than 16 feet from the high point of the roof (chimney flues excluded) to the highest point of natural grade under the house.

CONDITION 2: (Unit 3 only) No structure shall be more than one story or 16 feet in height, except that up to 20% of the total roof area may be 20 feet in height if at least an equal amount of the total roof area is a corresponding distance below the 16 foot maximum height. Height is measured as the vertical distance from the highest and lowest points of natural grade beneath the enclosed portion of the structure.

CONDITION 3: Because subdivision geologic studies have indicated that certain lots require an additional soils engineering study to ensure proper construction, the following lots in Units 1, 2, and 3 must meet the following specific requirements:

1. Building layout and foundation plans shall be reviewed by an engineering geologist.
2. The engineering geologist may require inspection of foundation excavations prior to pouring concrete if slopes are more than 20%.

Units 1 and 2

APNs 100-255-003, 004, 009, 010
100-261-005-007

100-271-004, 005
100-281-008-010
100-282-004-08, 018, 019
100-291-002-005, 017, 019-021
100-340-073, 074, 075, 078

Unit 3

APNs 100-380-031, 032
100-400-049
100-420-025, 037
100-440-008
100-450-002

CONDITION 4: The following lots in Unit 3 must meet the following additional soils/geologic requirements:

Unit 3

APNs 100-380-030, 033-036
100-400-013, 016, 017
100-410-038, 039, 040, 062
100-420-073
100-450-001

1. A surface/subsurface foundation investigation by an engineering geologist is required based on the proposed building location prior to foundation design.
2. Building layout and foundation plans must be reviewed by a registered engineering geologist.
3. The engineering geologist is likely to require inspection of foundation excavations while excavating equipment is on the site and before forms and steel are place.

CONDITION 5: The following lots require an archaeological field study and implementation of reasonable mitigation measures when recommended by the study:

APNs 100-261-020
100-380-054
100-420-720

CONDITION 6: The following lots lie within 300 feet of a designated freshwater marsh. To mitigate possible impacts on the marsh, the following measures shall be employed:

APNs 100-281-007-010
100-292-004-010

1. Any grading, cut or fill shall occur between May 15 and September with immediate reseeding of any disturbed areas. This requirement may be waived if an erosion control plan is submitted.
2. Finished cut slopes shall be 3:1 or flatter.
3. Use of pole, caissons and grade beam, or similar construction is strongly encouraged to minimize grading on these lots.
4. Retaining devices such as railroad ties shall be used downslope from all structures, with thick plantings of native grasses on the downstream side of the ties.

CONDITION 7: All development shall comply with the Bodega Harbour Design Regulations and homeowners' CC&Rs. Evidence of Final Design Review approval (Design Review letter) must be presented to the Sonoma County Permit and Resource Management Department. On any lot with a slope greater than 5%, the Design Review letter shall indicate appropriate measures for erosion control of storm runoff which have been included in the project design.

No final planning approval sign-off shall occur until the planner sees the Final Design Review approval letter and the Bodega Harbour checklist.

2. CATEGORICAL EXCLUSION FOR TAYLOR TRACT AND FIRST ADDITION, BODEGA BAY

One single-family dwelling for each existing vacant parcel is categorically excluded from a Coastal Permit in the area west of Highway 1 in the Taylor Tract and the First Addition if it meets all of the following conditions. If it does not meet all of the following conditions, a Coastal Permit is required.

1. The exclusion shall apply only to those parcels depicted on Exclusion Map B-2.
2. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by structure to ensure community compatibility.
3. Dwelling units shall be subject to Design Review and conform to Bodega Bay "Core Area" Coastal Plan Design Guidelines.
4. The following lots are subject to the requirements of the Alquist-Priolo Special Studies Zone (engineered foundations) enforced by the Sonoma County Permit and Resource Management Department.

APNs 100-080-011, 017, 019, 022-027, 031, 055, 057, 058, 064, 065
100-092-001-009
100-093-002-006, 008, 010, 011, 015-023
100-094-001, 004-007
100-095-001-007
100-096-014-019, 033, 034

5. The following lots lie within 300 feet of a designated freshwater marsh. A grading, erosion, and sediment control plan prepared by a civil engineer is required to mitigate possible impacts on the marsh.

AP# 100-080-045, 046, 054, 055
100-090-025, 030, 031

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2.1 Categorical Exclusion Conditions Attachment "B-2" For Villa Marina, Bodega Bay

One single-family dwelling for each existing vacant parcel in the Villa Marina Subdivision is categorically excluded from Coastal Permits if it meets to following conditions. If it does not meet any of the conditions, a Coastal Permit is required.

1. The exclusion shall apply only to those parcels depicted as excludable parcels on Exclusion Map B-2.
2. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by structure.
3. All dwellings are subject to design review and shall conform to Coastal Zone design guidelines.
4. The following parcels are subject to requirements of the Alquist-Priolo Special Studies Zone (engineered foundations) enforced by the County Permit and Resource Management Department:

AP# 100-070-012-017
100-070-026-028

5. The following parcels require an engineering geologist review and approve grading, site preparation, drainage, and foundation plans to determine there will be no significant impacts:

AP# 100-070-012-017
100-070-026-028

6. The following parcels require an archaeological study, and implementation of reasonable mitigation measures when recommended by the study:

AP# 100-070-012, 026, 028

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2.2 Categorical Exclusion Conditions Attachment "B-2" for W Haleship Area, Bodega Bay

One single family dwelling for each existing vacant parcel in the Whaleship Road area is categorically excluded from Coastal Permits if it meets the following conditions. If it does not meet any of the conditions, a Coastal Permit is required.

1. The exclusion shall apply only to those parcels depicted as excludable parcels on Exclusion Map B-2. Remaining parcels are not excluded because they are within 100 feet of a designated marsh, contain marshes or ponds, potential public trust land, or are steep and present significant design issues.
2. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by structure.
3. All dwellings are subject to design review and shall conform to Coastal Zone Design guidelines.

4. The following parcels are subject to requirements of the Alquist-Priolo Special Studies Zone (engineered foundations) enforced by the County Permit and Resource Management Department:

AP# 100-051-013-017

5. The following parcels require that an engineering geologist review and approve all grading, site preparation, drainage, and foundation plans to determine there will be no significant impacts:

AP# 100-051-013-017

The engineering geologist report shall contain, at a minimum, the information specified in the Coastal Commission Statewide Interpretive Guidelines concerning Geologic Stability of Blufftop Development.

3. CALIFORNIA COASTAL COMMISSION CATEGORICAL EXCLUSION ORDER E-81-5, ADOPTED IN 1981, SONOMA COUNTY

The Commission by a two-thirds vote of its appointed members hereby adopts an order, pursuant to Public Resources Code Section 30010(e) and 30610.5(b), categorically excluding from the permit requirements of the California Coastal Act of 1976 the categories of development within the specifically defined geographic areas described below:

I. BACKGROUND

Section 30610 of the California Coastal Act allows the State Commission to adopt a Categorical Exclusion for a specific type of development within a defined geographic area.

Section 30610(e) states that no Coastal Development Permit shall be required for the following types of development and in the following areas:

"Any category of development, or any category of development within a specifically defined geographic area, that the Commission, after public hearing, and by two-thirds vote of its appointed members, has described or identified and with respect to which the Commission has found that there is no potential for any significant adverse effect, either individually or cumulatively, on coastal resources or on public access to, or along, the coast and, where such exclusion precedes certification of the applicable local coastal program, that such exclusion will not impair the ability of local government to prepare a local coastal program."

Public Resources Code Section 30610.5(b) additionally requires that the following findings and provisions must be made:

Section 30610.5(b) states in part:

"Every exclusion granted...shall be subject to terms and conditions to assure that no significant change in density, height, or nature of uses will occur without further proceedings under this division and an order granting an exclusion under Subdivision (e) of Section 30610...may be revoked at any time by the Commission if the conditions of the exclusion are violated."

The County of Sonoma seeks the exclusion by the California Coastal Commission of categories of development in the geographic areas designated in **Exhibit 1** from Coastal Development Permit requirements. The categorical exclusion may be authorized pursuant to Public Resources Code Section 30610(e) and 30610.5(b). The geographic area is the entire coastal zone of the County of Sonoma. Within this area, the County

proposes that the following activities within the specific areas shall not require a Coastal Development Permit.

II. CATEGORIES OF DEVELOPMENT, GEOGRAPHIC AREAS, AND CONDITIONS

A. Category of Development

Single-family residences on existing parcels in Units I and II of the Bodega Harbour Subdivision.

Geographic Areas of Exclusion

Existing lots in Units I and II of Bodega Harbour Subdivision except APNs 100-032-006, 008, 014-016, 048-053, 062-066, and 100-033-033-036, as shown on the attached Exclusion Map B-1.

Conditions

1. All residences must be no higher than 16 feet from the highest point of natural grade under the house to the high point of the roof (chimney flues excluded).
2. Because subdivision geologic studies have indicated that certain lots require additional soils engineering study to ensure proper construction, the following lots must meet specified requirements.

APNs 100-255-003, 004, 009, 010
 100-261-005-007
 100-271-004, 005
 100-281-008-010
 100-282-004-008, 018, 019
 100-291-002-005, 017-021
 100-034-073-075, 078

Requirements

- a. The building layout and foundation plans shall be reviewed by an engineering geologist.
- b. The engineering geologist may require inspection of foundation excavations prior to pouring concrete if slopes are more than 20 percent.
3. The following lot requires an archaeological field investigation, and implementation of reasonable mitigation measures when recommended by the study: APN 100-261- 020.
4. The following lots lie within 300 feet of a designated freshwater marsh: APNs 100-281-007-010; 100-029-004-010.

To mitigate possible impacts on the marsh, the following measures shall be employed:

- a. Any grading, cut or fill shall occur between May 15 and September 15 with immediate reseeding of any disturbed areas. This requirement may be waived if an erosion control plan is submitted.
 - b. Finished cut slopes shall be 3:1 or flatter.
 - c. Use of pole, caissons and grade beam, or similar construction is strongly encouraged to minimize grading on these lots.
 - d. Retaining devices such as railroad ties shall be utilized downslope from all structures with thick plantings of native grasses on the downstream side of the ties.
5. All development shall comply with Bodega Harbour Design Regulations and homeowners' CC&Rs. Evidence of final Design Review approval (letter) must be presented to the Permit and Resource Management Department. On any lot with a slope greater than 5 percent, the Design Review letter shall indicate appropriate measures for erosion control of stormwater runoff which have been included in the project design.

B. Category of Development

Single-family residences on existing parcels in the Taylor Tract and First Addition, Bodega Bay.

Geographic Area of Exclusion

Existing parcels in the Taylor Tract and First Addition, as shown on the attached Exclusion Map B-2.

Conditions

1. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by the structure.
2. Dwelling units shall be subject to Design Review and must conform to Bodega Bay "Core Area" Coastal Plan Design Guidelines.
3. The following lots are subject to the requirement of engineered foundations for development within the Alquist-Priolo Special Studies Zone, as enforced by the Sonoma County Permit and Resource Management Department:

APNs 100-098-011-017, 019, 022-027, 031-055, 057, 058, 064, 065
 100-092-001-009
 100-093-002-006, 008, 010, 011, 015-023
 100-094-001, 004-007

100-095-001-007
100-096-014-019, 033, 034

4. The following lots lie within 300 feet of a designated freshwater marsh:

APNs 100-051-013-017

A grading, erosion, and sediment control plan prepared by a civil engineer is required to mitigate possible impacts on the marsh.

C. Category of Development

Single-family residences on existing parcels in the Whaleship Area, Bodega Bay.

Geographic Area of Exclusion

Existing parcels in the Whaleship Area as shown on Exclusion Map B-2.

Conditions

1. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by the structure.
2. All dwellings are subject to design review by the Sonoma County Permit and Resource Management Department and shall conform to Coastal Zone Design Guidelines.
3. The following parcels are subject to requirements of the Alquist-Priolo Special Studies Zone (engineered foundations) enforced by the Sonoma County Permit and Resource Management Department:

APNs 100-051-013-017

4. The following parcels require that an engineering geologist review and approve all siting of structures, grading, site preparation, drainage, and foundation plans to determine where will be no unmitigable hazards to life or property:

APNs 100-051-013-017

The engineering geologist report shall contain, at a minimum, the information specified in the Coastal Commission Statewide Interpretive Guidelines concerning Geologic Stability of Blufftop Development (5-77).

D. Category of Development

Single-family residences on existing parcels in the Villa Marina Subdivision, Bodega Bay.

Geographic Area of Exclusion

Existing parcels in the Villa Marina Subdivision as shown on Exclusion Map B-2.

Conditions

1. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by the structure.
2. All dwellings are subject to design review by the Sonoma County Permit and Resource Management Department and shall conform to Coastal Zone Design Guidelines.
3. The following parcels are subject to requirements of the Alquist-Priolo Special Studies Zone, including engineered foundations, as enforced by the Sonoma County Permit and Resource Management Department:

APNs 100-007-012-017
 100-001-020-028

4. The following parcels require that an engineering geologist review and approve the siting of structures and all grading, site preparation, drainage, and foundation plans; and to determine there will be no unmitigable hazards to life and property:

APNs 100-007-012-017
 100-007-026-028

5. The following parcels require an archaeological study and the implementation of reasonable mitigation measures when recommended by the study:

APNs 100-007-012,026,013

E. Category of Development

The pruning, trimming or removal of non-commercial trees that are part of a vegetation management program administered by the California Department of Parks and Recreation to provide for:

- a. tree hazard control
- b. arboriculture
- c. exotic (non-native) tree removal as part of a program to restore an area to its native vegetation
- d. fire prevention or control
- e. insect or disease control
- f. fuel break or fuel reduction

- g. scenic vista clearing
- h. soil erosion control
- i. ecological management

Geographic Area of Exclusion

All California State Park, reserves, and recreation areas within the exclusion areas mapped on Exhibit 1.

Conditions

A report of the activity shall be submitted to the Director of the Permit and Resource Management Department at least 10 days prior to that activity. Emergency fire control measures and the removal of trees which pose an imminent threat to public safety, such that the vegetation removal is exempted from the Department of Parks and recreation Operations Manual approval procedures, are exempt from the condition of this exclusion requiring a report and review by the Director of the Permit and Resource Management Department.

The proposed activity is excludable under this order only if the Director of the Permit and Resource Management Department reviews the proposed activity and certifies, prior to the commencement of any activity, that the tree trimming, pruning, and removal will protect the resource values of the following:

1. Any tree or trees that are landmark trees or that are of special cultural or coastal community significance.
2. Any tree or trees that are visually significant and/or important scenic resource.
3. Any tree or trees that provide shade or act as a buffer against visual or noise intrusion in areas used by the public for recreational purposes or access to or along the coast.
4. Any tree or trees which are an integral part of an environmentally sensitive habitat area.
5. Any tree or trees that are native California species.
6. Any tree or trees that are of educational or scientific value because of their location, species, size, habitat value or other natural features.
7. Any tree or trees that are important in the control of erosion, in the provision of windbreaks or other climate control, in the provision of protection to surrounding vegetation, in the provision of soil stabilization, or in the maintenance of flood control protection.

8. Any tree which is rare or endangered or provides habitat for rare or endangered species as listed in the following sources:
 - a. Volume 60, Code of Federal Regulations, Part 23 (Based upon Convention on International Trade in Endangered Species of Wild Fauna and Flora).
 - b. Volume 60, Code of Federal Regulations, Part 17 (Based upon Endangered Species Act of 1973).
 - c. Title 14, California Administrative Code, Section 670.2 (Plants of California Declared to be Endangered or Rare).
 - d. California Native Plant Society Special Bulletin No.1, Inventory of Rare and Endangered Vascular Plants of California (The latest edition published shall be used).

The rare or endangered species lists referred to above are continually updated. The developer shall consult the most currently published versions of these lists.

F. Category of Development

The raising, grazing, maintaining, and breeding of horses, cattle, sheep, goats, and similar livestock, except for the construction of feedpens, milking sheds, feedsheds, barns, or similar structures within areas designated as Sanctuary-Preservation, Conservation, or Potentially Sensitive (hereinafter referred to collectively as "Sensitive Areas") on the adopted Open Space Map.

Geographic Area of Exclusion

Parcels of land in the Sonoma County Coastal Zone which are zoned Resources and Rural Development, Land Intensive Agriculture, Land Extensive Agriculture or Diverse Agriculture and designated as excluded areas by the map attached as **Exhibit 1**.

Conditions

This exclusion shall apply only to parcels five acres or larger.

G. Category of Development

The outdoor growing and harvesting of shrubs, plants, flowers, vines, fruits, vegetables, hay, grain, and similar food and fiber crops, including packing and polishing of unprocessed agricultural yield.

Within any Sensitive Areas designated on the adopted Open Space Map, this exclusion does not include the operation or maintenance of any power driven machinery, nor the erection of any structures for growing, harvesting, packing or polishing unprocessed agricultural yield.

Geographic Area of Exclusion

Parcels of land in the Sonoma County Coastal Zone which are zoned Resource and Rural Development, Land Intensive Agriculture, Land Extensive Agriculture, Diverse Agriculture, Agriculture and Residential, or Rural Residential and designated as excluded areas by the map attached as Exhibit 1.

H. Category of Development

The raising, feeding, maintaining, and breeding of poultry, fowl, rabbits, furbearing and similar animals for use of the persons residing on the property.

Geographic Area of Exclusion

Parcels of Land in the Sonoma County Coastal Zone which are zoned Resources and Rural Development, Land Intensive Agriculture, Land Extensive Agriculture, Diverse Agriculture, and Timber Production and designated as excluded areas by the map attached as Exhibit 1.

Conditions

Such use must be incidental and appurtenant to a single-family dwelling.

I. Category of Development

Reforestation and restoration of timber and agricultural areas incidental to the growing and harvesting of timber and agricultural products. Exempted developments include the planting of trees, hydromulching, removal of temporary culverts, removal of slash, restoration of the natural contours of dirt roads, contour plowing and other restoration of land which has been subject to harvesting of timber or other agricultural products to a habitat value which existed prior to human activity. The exclusion does not include structural development or grading which would otherwise require a coastal permit under the Site Development and Erosion Control Standards of this chapter. Structural development is defined as the placement, erection, or construction of any structure. Structure includes, but is not limited to, any building, road, pipe, conduit, or aqueduct.

Geographical Area of Exclusion

Parcels of land in the Sonoma County Coastal Zone which are zoned Resources and Rural Development, Timber Production, Land Intensive Agriculture, Land Extensive Agriculture, or Diverse Agriculture and designated as excluded areas by the map attached as Exhibit 1, except for areas which are identified as Sensitive Areas on the Adopted Open Space Map.

Conditions

These activities must be carried out in a manner that protects riparian, and other sensitive habitat areas and deals adequately with water quality concerns. Site

Development and Erosion Control Standards of this chapter shall govern developments under this category, where applicable. These developments must be carried out in accordance with the Environmental Resource Management Recommendations listed in Chapter III of the Local Coastal Plan, the North Coast Water Quality Control Basin Plan and the Department of Fish and Game regulations.

J. Category of Developments

Maintenance and protection of wildlife preserves, including the stocking of fish, the planting of feed grains, the posting of signs and the erection and maintenance of barriers to predators.

Geographic Area of Exclusion

Parcels of Land in the Sonoma County Coastal Zone zoned Resource and Rural Development, Timber Production, Land Intensive Agriculture, Land Extensive Agriculture, or Diverse Agriculture and designated as excluded areas by the map attached as Exhibit 1.

Conditions

Operation of any wildlife and fishing preserve and refuge must be approved by the Department of Fish and Game and must be carried out in accordance with the Environmental Resource Management Recommendations listed in Chapter III of the Local Coastal plan.

K. Category of Development

The construction, improvement or expansion of accessory structures or uses appurtenant and incidental to agricultural and timber operations such as sheds, barns, and corrals.

Geographic Area of Exclusion

Land in the Sonoma County Coastal Zone which is zoned Land Intensive Agriculture, Land Extensive Agriculture, Diverse Agriculture, Timber Production, Resources and Rural Development, or Resources and Rural Development/Agricultural Preserve subject to and designated as excluded by the map attached as Exhibit 1.

Conditions

Development is exempt under this category only if all of the following conditions are met:

1. Development is located east of Highway One and not within view of any designated scenic road;

2. It is not located within any Sensitive Area or hazardous areas so designated in the County's adopted Open Space Map;
3. It does not affect sensitive areas in a manner contrary to the Environmental Resource Management Recommendation listed in Chapter III of the Local Coastal Plan;
4. It does not involve a designated historic site or area;
5. It meets County erosion control, grading and zoning requirements.

L. Category of Development

Geotechnical studies not requiring a grading permit. In addition, grading or fill as follows:

1. An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation nor exempt any excavation having an unsupported height greater than 5 feet after the completion of such structure.
2. Cemetery graves.
3. Refuse disposal sites controlled by other regulations.
4. Excavations for wells or tunnels or utilities.
5. Exploratory excavations under the direction of soil engineers or engineering geologists.
6. An excavation which (a) is less than 2 feet in depth, (b) which does not create a cut slope greater than 5 feet in height and steeper than one and one-half horizontal to one vertical.
7. A fill less than 1 foot in depth and placed on natural terrain with a slope flatter than five horizontal to one vertical, or less than 3 feet in depth, not intended to support structures, which does not exceed 50 cubic yards on any one lot and does not obstruct a drainage course.

Geographic Area of Exclusion

Land in the Coastal Zone of Sonoma County designated as excludable areas by the map attached as Exhibit 1, not within any sensitive or hazardous areas as designated by the County's adopted Open Space Map, nor affecting any sensitive area in a manner contrary to the Environmental Resource Management Recommendations.

Conditions

This exclusion shall not apply to grading or fill on land with slopes over 30% nor where the Soils Conservation Service of the U.S. Department of Agriculture has identified the soils as moderately to severely erodible.

M. Category of Development

Controlled burns regulated by the Department of Forestry and the Air Pollution Control District.

Geographic Area Exclusion

Land in the Sonoma County Coastal Zone mapped on the attached Exhibit 1 as excluded areas.

Conditions

All required permits must be obtained from the Department of Forestry and the Air Pollution Control District.

N. Category of Development

A single residential dwelling on a vacant, legal lot or improvements to an existing residential dwelling or accessory structures or uses incidental and appurtenant to a single-family dwelling provided it does not affect scenic views or sensitive coastal resources.

Geographic Area of Exclusion

Parcels of land in the Sonoma County Coastal Zone designated as excludable on the map attached as Exhibit 1 east of Highway One (except for parcels within the Timber Cove subdivision); not within view of any designated scenic road).

O. Category of Development

One single family dwelling for each existing vacant parcel in Unit III of Bodega Harbour Subdivision.

Geographic Area of Exclusion

Vacant single family residential lots in Unit III of Bodega Harbour Subdivision as shown on Exhibit B-2.

Conditions

1. No structure shall be more than one story or 16 feet in height, except that up to 20 percent of the total roof area may be 20 feet in height if a corresponding distance is below the 16 foot maximum height. Height is measured as the vertical distance from the median elevation of the highest

- and lowest points of natural grade beneath the enclosed portion of the structure to the high point of the roof.
2. Because subdivision geologic studies have indicated that certain lots require additional soils engineering study to insure proper construction, the following lots must meet specified requirements.

APN 100-038-003, 032
 100-040-049
 100-042-025,037
 100-044-008
 100-045-002
 - a. Building layout and foundation plans shall be reviewed by an engineering geologist.
 - b. The engineering geologist may require inspection of foundation excavations prior to pouring concrete if slopes are more than 20 percent.
 3. The following lots in Unit III must meet additional soils/geologic requirements:

APN 100-038-030, 033-036
 100-040-013, 016, 017
 100-041-038, 039, 040, 062
 100-042-073
 100-045-001
 - a. A surface/subsurface foundation investigation by an engineering geologist is required based on the proposed building location prior to foundation design.
 - b. Building layout and foundation plans must be reviewed by a registered engineering geologist.
 - c. The engineering geologist is likely to require inspection of foundation excavations while excavating equipment is on the site and before forms and steel are in place.
 4. The following lots require an archaeological field investigation, and implementation of reasonable mitigation measures when recommended by the study:

APN 100-380-054
 100-420-072
 6. All development shall comply with Bodega Harbour Design regulations and homeowner's CC&Rs.

Evidence of final Design Review approval (letter) must be presented to the Permit and Resource Management Department. On any lot with a slope greater than 5 percent, the Design Review letter shall indicate appropriate measures for erosion control of storm runoff which have been included in the project design.

P. Category of Development

Day care facilities for six or fewer children conducted in existing residence.

Geographic Area of Exclusion

Land in the Sonoma County Coastal Zone excluded under Exhibit 1.

Q. Category of Development

Home occupation carried out in an existing residence. This exclusion shall apply only to any activity which is carried on in a residence and which results in a product or service not used in its entirety by the family group, and which meets all of the following criteria:

1. The use is clearly incidental and secondary to the use of the dwelling for dwelling purposes;
2. The use is conducted entirely within a dwelling and is carried on by the inhabitants thereof; this does not include attached or detached garages or other accessory buildings;
3. The use does not appreciably change the character of the dwelling or adversely affect the uses permitted in a residential district. No home occupation shall be permitted which creates objectionable noise, dust, smoke, odor, or other nuisance;
4. The use shall not cause more than eight (8) customers or clients to come to the dwelling unit for service or products during any one (1) day;
5. The use shall not create substantial additional traffic or require additional parking;
6. No persons are employed other than those necessary for domestic purposes;
7. The use does not occupy more than one-quarter (1/4) of the total floor space of the dwelling;
8. The entrance to the space devoted to a home occupation shall be from within the building. No internal or external alterations or construction features are permitted;

9. Signing shall be limited to one (1) attached, non-illuminated, two (2) square foot sign;
10. No commercial vehicle shall be garaged, except that a single one ton or smaller truck may be ungaraged so long as signs on the truck are limited in size to normal logos found on business vehicles.

Geographic Area of Exclusion

Parcels within the Coastal Zone of Sonoma County shown as excluded on the map attached as Exhibit 1.

Conditions

Each person proposing to conduct a home occupation shall submit a letter to the Director of the Permit and Resource Management Department fully disclosing the nature and extent of the proposed occupation. The Director of the Permit and Resource Management Department may require the person proposing to conduct the home occupation to obtain written consent of owners of neighboring properties, or to obtain a use permit in cases where the proposed home occupation be incompatible with the particular neighborhood.

R. Category of Development

Signs subject to design review and conforming to Coastal Zone Design Guidelines.

Geographic Area of Exclusion

Land in the Sonoma County Coastal Zone designated as excluded in Exhibit 1.

S. Category of Development

Fences appurtenant to single-family residential, agricultural or animal husbandry use.

Geographic Area of Exclusion

Land in the Sonoma County Coastal Zone shown as excluded by Exhibit 1.

Conditions

No fence which might obstruct public accessways or public views to the ocean is exempted under this order.

No fence shall be allowed to obstruct any path, trail, or road over which there is evidence of use by the public.

If the construction of a fence is nonetheless necessary, and there is evidence of public use, then the developer shall preserve the accessway by erecting a stile, installing a gate, or by other appropriate physical means.

Exhibit 1

"Exhibit 1", as used in this document, refers to the adopted map of exclusion areas which was prepared by the staff of the Coastal Commission and incorporated herein by this reference. The map is on file with both the County and the Commission. This map shows areas excluded from this request for categorical exclusion under Section 30610.5(b) of the Coastal Act, namely: "Tide and submerged lands, beaches, and lots immediately adjacent to the inland extent of any beach, or of the mean high tide line of the sea where there is no beach, and all lands and waters subject to the public trust," where land is in the jurisdiction of the State Coastal Commission.

III. FINDINGS

Provisions for Categorical Exclusions Public Resources Code Section 30610(e) states that no coastal development permit shall be required for...

Any category of development, or any category of development with in a specifically defined geographic area, that the Commission, after public hearing and by two-thirds vote of its appointed members, has described or identified and with respect to which the Commission has found that there is no potential for any significant adverse effect, either individually or cumulatively, on coastal resources or on public access to, or along, the coast, and where such exclusion precedes certification of the applicable local coastal program, that such exclusion will not impair the ability of local government to prepare a local coastal program.

Public Resources Code Section 30610(b) additionally requires that the following findings and provisions must be made.

30610.5 (b) (in part)

Every exclusion granted shall be subject to terms and conditions to assure that no significant change in density, height or nature of uses will occur without further proceedings under this division and an order granting an exclusion under Subdivision (d) of Section 30610..."may be revoked at any time by the Commission if the conditions of the exclusion are violated."

The findings below support the conclusions that the exclusion has no potential for significant adverse effect, either individually, or cumulatively, on coastal resources or on public access to or along the coast and that such exclusion will not result in a significant change in density, height or nature of uses.

1. Single-Family Homes (Categories A, B, C, D, N, O,)

The exclusion covers single-family homes in specific parts of Bodega Bay including the Bodega Harbour Subdivision, and in the coastal zone generally where homes would not be visible from Highway One and would meet certain other conditions.

- a. Visual and Scenic Resources. The Coastal Act requires the protection of scenic and visual quality of coastal areas and the protection of views to and along the ocean and scenic coastal areas (Sec. 30251).

Furthermore, the Act provides for the protection of scenic communities which are popular visitor destination points (Sec. 30253(5)).

The Sonoma County Coastal zone is a highly scenic area where construction of houses and other structures may affect public views. Communities on the Sonoma Coast such as Bodega Bay area popular visitor destination points where protection of community character is an important Coastal Act goal.

In the Bodega Bay area, the exclusion protects public views and visual resources through limiting the height of houses to be built and requiring design review. (For houses in Bodega Harbour Subdivision, design review would be accomplished by the Homeowner's Association under the existing recorded restrictions of the subdivision. (For houses elsewhere in Bodega Bay, design review would be accomplished by the Sonoma County Permit and Resource Management Department under Coastal Plan design guidelines approved as part of the Coastal Plan.

Outside of Bodega Bay, the exclusion would protect coastal visual resources by not applying to homes within view of any designated scenic road (including Highway One). For areas not with in view of scenic roads, homes are excluded without a height limit or other design restrictions because the construction of a house in such locations would not have a potential for adverse impacts on coastal visual resources.

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As proposed and conditioned, the exclusion of single-family dwellings will not have an adverse impact either individually or cumulatively, on coastal visual resources.

- b. Geologic Hazards. Section 30253 of the Coastal Act provides that new development shall minimize risks to life and property in areas of high geologic hazard and shall assure stability and structural integrity. The San Andreas fault zone passes near the community of Bodega Bay, and much of the proposed excluded area lies within the Alquist-Priolo Special Geologic Studies Zone. In order to meet the requirements of Section 30253 of the Coastal Act, the exclusion provides for engineered foundations and other engineering work in areas of Bodega Harbour Subdivision and elsewhere in Bodega Bay

where lots have the potential for instability. In addition, foundations for houses within the Alquist-Priolo Geologic Studies Zone must be designed by a registered civil engineer or engineering geologist. As proposed and conditioned, the exclusion will minimize risks to life and property in areas of geologic instability, in accordance with Section 30253.

- c. Adequacy of Services. Section 30250 (a) provides that new development shall be located within or near existing developed areas where services are available to accommodate it. In Bodega Bay, houses constructed under this exclusion will be served by community sewage disposal system at Bodega Bay serves approximately 420 houses. The number of potential additional connections in the community is approximately 700 lots, including a small number of lots not covered under this exclusion. The total of existing and potential development is approximately 1120 homes, which is significantly less than the sewage disposal system's capacity of approximately 1775 residential units.

The Coastal Plan states that existing water sources available to the Bodega Bay Public Utilities District may not be adequate to support full build-out of the community. The Plan states that the Public Utilities District is exploring additional supplies. Until additional supplies are available, the Coastal Plan calls for limiting development to existing lots (Phase 1 Land Use Plan) and relating new development to water capacities. If adequate water is not available for all lots, the Plan states that an allocation system should be developed and that additional water supplies should be pursued.

The construction of new homes in Bodega Bay has proceeded at a relatively slow pace in relation to the number of vacant lots remaining in the community. This moderate rate of growth ensures that development of new homes under this exclusion will not outrun the ability of the Public Utilities District to develop new water sources and to provide service to all existing lots.

Outside Bodega Bay, the exclusion covers single-family homes on legal lots which meet enumerated County standards including sewage disposal and water supply standards. (The subdivision at Timber Cove which is identified by the Coastal Plan to have particular water supply problems is specifically not covered by the Exclusion). In other areas where the County Environmental Health Department's requirements for water supply cannot be met including communities such as Jenner which are identified by the Coastal Plan as having inadequate water for additional development, the Exclusion would not apply.

As proposed and conditioned, the Exclusion ensures that all development will be served by adequate sewage disposal and water supply systems, consistent with Section 30250(a) of the Coastal Act. The Exclusion has no potential for

significant adverse effect, either individually or cumulatively, on the ability of public services to support new development.

- d. Public Access/Traffic. Section 30210 of the Coastal Act provides that maximum access and recreational opportunities shall be provided for all the people, consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse. The exclusion of certain single-family homes, as proposed, will not significantly affect public access to or along the coast, for the following reasons. The first row of parcels adjacent to the sea is not covered by the exclusion. Furthermore, most parcels in Bodega Bay which are excluded are located inland of the first public road paralleling the sea. In other areas, the Coastal Plan Access Plan provides for the acquisition and/or development of additional accessways, beyond the extensive system of State and County parks which now exist on the Sonoma coast. Development of homes on existing lots covered by this Exclusion does not have the potential for impairing public access to the coast.

The Coastal Plan states that traffic congestion along Highway One is a problem, particularly on peak summer weekends. The Plan recommends certain highway and parking improvements that would help to improve traffic flow. The Plan also recommends the construction of a future Highway One bypass around the community of Bodega Bay, where the most significant traffic congestion occurs. The Plan provides that development should be limited to the Phase 1 land use plan (development on existing lots) until such time as a Highway One bypass is provided (and additional water is available). At that time, the Phase 2 land use plan (expanded development) would be implemented.

Throughout the coastal zone, the Plan generally provides for continued residential development on existing legally subdivided lots if water, septic system and other applicable regulations can be met. The pace of residential development on the Sonoma Coast has been modest. Continued moderate growth can be accommodated by existing road systems with the improvements recommended by the Coastal Plan. Major road improvements (Highway One bypass) would be required in Bodega Bay before additional areas could be opened to residential development. As proposed and conditioned, the Exclusion has no potential for any significant adverse effect, either individually or cumulatively, on public access to or along the coast.

2. Trimming or Removal of Trees on State Parks Land (Category E)

Section 30240 of the Coastal Act provides that environmentally sensitive habitat areas shall be protected against any significant disruption of habit values. Commission studies have indicated that trees provide and protect wildlife habitat and enhance the biological productivity of coastal areas. Thus, trees are an

important element in environmentally sensitive habitat areas. The Commission finds that all trees which are in areas designated by the Coastal Plan to be environmentally sensitive habitat areas or riparian areas shall not be covered by this Exclusion. As conditioned, the Exclusion requires that the Sonoma County Director of the Permit and Resource Management Department review any proposed tree trimming or cutting and certify that the proposed activity will protect environmentally sensitive habitat areas.

Section 30251 of the Coastal Act provides for the protection of the scenic and visual qualities of coastal areas.

Section 30253(5) provides for the protection of special communities which are popular visitor-destination points. The natural forest of the Sonoma Coast and the planted hedgerows and windbreaks of the Sonoma Coast are important elements in the scenic and visual quality of the area. Certain old or large stands of trees serve as community landmarks and bear particular importance in establishing community character. The Commission finds that the Exclusion shall not apply to the removal or trimming of trees which have special scenic or cultural significance. The Director of the Permit and Resource Management Department is required to certify that any proposed activity under this Exclusion shall protect landmark trees or trees of special scenic or cultural significance.

Section 30243 of the Coastal Act provides that the long-term productivity of soils shall be protected. Trees provide a natural means of controlling soil erosion by acting as windbreaks and soil stabilizers. The Exclusion provides that the Director of the Permit and Resource Management Department must certify that any proposed activity protects trees which are important in the control of erosion and in the provision of windbreaks. The Commission finds that, as conditioned, this Exclusion will assure the long-term productivity of soils and will not contribute to soil erosion.

As proposed and conditioned, the exclusion of tree-trimming and tree-cutting has no potential for any significant adverse effect, either individually or cumulatively, on coastal soil resources.

3. Raising of Cattle, Sheep, and Other Livestock (Category F).

The Coastal Plan encourages agriculture, including grazing and dairy uses, in the coastal zone. Extensive areas of the coastal zone are zoned for agriculture under the County's Implementation Program. This Exclusion covers the raising of livestock and the construction of feedpens and other structures incidental to the raising of livestock.

Section 30240 of the Coastal Act provides for the protection of environmentally sensitive habitat areas. As conditioned, the Exclusion does not apply to construction of feedpens, or other structures incidental to livestock raising within

Sensitive Areas as mapped on the County's Open Space Map. As conditioned, the Exclusion will have no potential or any significant adverse impact, either individually or cumulatively, on environmentally sensitive habitat areas.

4. Planting and Harvesting of Crops (Category G).

The Coastal Plan and Implementation Program designate large areas of the coastal zone for agricultural use.

Much of the Sonoma County coastal zone is suited for grazing rather than cultivation of crops, but where crops are appropriate, the Exclusion covers the growing and harvesting of food and fiber crops. As condition, the Exclusion does not apply to use of mechanized farm equipment or placement of structures within Sensitive Areas as mapped on the County's Open Space Map. Thus, the Exclusion protects Environmentally Sensitive Habitat areas, consistent with Section 30240 of the Coastal Act.

5. Raising of Poultry, Rabbits, and Similar Animals (Category H).

The Exclusion covers the raising of small animals for the use of persons residing on the property. As conditioned, the Exclusion applies only to parcels with a single-family dwelling. The Exclusion is limited to the keeping of animals incidental to residential use, and it therefore presents no potential for any significant adverse effects on coastal resources.

6. Reforestation and Restoration of Timber and Agricultural Lands (Category I).

Activities covered by this category of the Exclusion Order are those which restore areas which have been subject to harvesting of timber or other agricultural products. Excluded activities include removal of slash, planting of trees, restoration of natural land contours, and similar activities. The conditions of the Exclusion require that such activities take place in accord with the Environmental Resource Management Recommendations of the Coastal Plan and other applicable County standards. The Environmental Resource Management Recommendations strictly define what activities can take place in riparian areas and other environmentally sensitive habitat areas. The excluded activities will act to improve and restore the habitat values of harvested areas. As conditioned, the Exclusion has no potential for significant adverse effects on coastal resources.

7. Maintenance of Wildlife Preserves (Category J).

This category of the Exclusion Order covers those activities which are carried on by the California Department of Fish and Game in wildlife preserves in order to maintain habitat values for fish and wildlife. As conditioned, the activities under the Exclusion, must be carried out in accord with the Environmental Resource Management Recommendations of the Coastal Plan which, provide for the

protection of environmentally sensitive habitat area, consistent with Section 30240 of the Coastal Act.

8. Construction of Agricultural Accessory Structure (Category K).

This category of the Exclusion Order covers the construction of barns, sheds, corrals, and other structures incidental to agricultural and timber operations. The conditions provide that developments are excluded only if they are located out of view of Highway One or other designated scenic roads, outside Sensitive or Hazardous Areas designated on the County's Open Space Map, and outside designated historic sites or areas, and If they meet certain other conditions. The conditions provide that excluded development will not have adverse effects on coastal visual resources, environmentally sensitive habitat areas, or historic resources, consistent with Coastal Act Sections 30251, 30240, and 30253(5).

9. Grading and Geotechnical Studies (Category L).

Section 30231 of the Coastal Act provides that "The biological productivity and the quality of Coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms...shall be maintained, and where feasible, restored through, among other means, controlling runoff,...and preventing substantial interference with surface water flow. Section 30253 of the Coastal Act states that "New development shall... neither create nor contribute significantly to erosion, geologic instability, or destruction of the site and surrounding areas.

The grading and fill exempted by this order is either limited in size, or undertaken, as part of a permitted use.

The direction of soil engineers or engineering geologists is a prerequisite of exploratory excavations permitted under subsection 1.

Only excavations limited to less than 2 (two) feet deep, or which do not create a cut slope greater than 5 (five) feet high and steeper than 1 ½ (one and one-half) horizontal to 1 (one) vertical are specified in subsection 6.

Only fill which is less than 50 (fifty) cubic yards on any one lot and does not construct a drainage course, and is less than 1 (one) foot deep, and placed on natural terrain with a slope flatter than 5 (five) horizontal to 1 (one) vertical, or less than 3 (three) feet deep, and not intended to support structures is allowed under subsection 7.

The wetlands, streams, estuaries, coastal waters and lakes protected under Section 30231 are either subject to the public trust or mapped as "Sensitive Areas". This exclusion does not authorize grading or fill in these areas without a coastal permit. The chances of runoff into these areas are minimized because the order does not exempt grading on slopes over 30%.

The order does not authorize grading of fill in any "hazardous area", as designated on the County's Open Space Map, nor on any land where the Soil Conservation Service has identified the soils as moderately to severely erodible. Only cut or fill consistent with the geologic safety policies of Section 30253 is excluded by this order.

10. Controlled Burns (Category M).

Section 30253 of the Coastal Act states that new development shall be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.

Section 30414 of the Coastal Act acknowledges that the State Air Resources Board and local air pollution control districts are the principal public agencies responsible for the establishment of air quality and air pollution control programs.

Section 30243 of the Coastal Act states that the long-term productivity of soils and timberlands shall be protected.

This order exempts controlled burns of timber. In some cases, the elimination of brush and timber is necessary to promote the rejuvenation of forests or to enhance habitat values. Such burns are exempted only if they are regulated by two other environmental regulatory agencies. The Coastal Act expressly recognizes the jurisdiction of the Air Pollution Control District to monitor burns. Given the effect of controlled burns and the supervision of such burns by responsible public agencies, the exclusion is consistent with the policies of the Coastal Act.

11. Day Care Facilities (Category P).

State law requires the regulatory agency to allow the operation of day care facilities for six or fewer children in existing residences.

12. Home Occupations Within Existing Structures (Category Q).

Only home occupations which meet specific criteria are exempted. Those criteria ensure that the use does not alter the residential character of the neighborhood, and that it has no impacts upon traffic, noise, or other factors affecting coastal resources or the quality of the environment.

13. Signs (Category R).

The Exclusion covers only signs which conform to Coastal Plan design guidelines. Furthermore, excluded signs are subject to county design review conducted by the County Permit and Resource Management Department. Application of the design guidelines and design review procedures to individual signs will ensure

that coastal visual resources are preserved, consistent with Section 30251 of the Coastal Act.

14. Fences Category (S).

Fences are excluded from permit requirements because they are an accessory structure to primary uses allowed in the certified Local Coastal Plan. Conditions of the order ensure that the fence(s) will have no impact on visual resources nor have the potential for interfering with public access.

15. The Commission certified that the Categories of development excluded under this order are allowed by right in Sonoma County, have specific development standards under the certified Local Coastal Program, and are handled ministerially by Sonoma County.

16. Consistency With Coastal Act Section 30610.

As demonstrated in the findings above, the proposed exclusion is consistent with the requirements of Coastal Act Section 30610(e) and 30610.5(b).

17. California Environmental Quality Act (CEQA)

For the same reasons that this exclusion will have no potential for any significant effect either individually or cumulatively on coastal resources, this exclusion will have no significant effect on the environment for purposes of the California Environmental Quality Act of 1970. (See attached Negative Declaration).

IV. CONDITIONS

1. Maps showing excluded areas with:

- a. the appropriate approved zone district,
- b. areas of actual or potential public trust,
- c. boundaries of parcels landward of the first public road paralleling the sea, and
- d. the sensitive and/or hazardous areas depicted on the County's adopted Open Space Map.

shall be submitted for Commission Executive Director review and concurrence before the County may implement the Exclusion.

2. The County of Sonoma shall maintain a record of any other permits which may be required for categorically excluded development which shall be made available to the Commission or any interested person upon request, pursuant to Section 30154 of the Commission Local Coastal Program Regulations.

3. The County of Sonoma shall, at an appropriate stage in the local approval process for the following development subject to this Exclusion, distribute to the applicant for such local approval an instruction sheet and form provided by the Executive Director of the Commission. After obtaining final local governmental approval but prior to commencing construction under this exclusion, such applicant shall send the completed form containing a brief description of the excluded development to the Commission:

In Units I and II of Bodega Harbour Subdivision:

APN 100-281-007-010
100-029-004-010

In Taylor Tract of the First Addition to the Taylor Tract:

APN 100-008-045, 046, 054, 055
100-009-025, 030, 031

The County of Sonoma shall notify the Coastal Commission in writing within 5 working days of its determinations that the above categories of exempted development are properly exempt from coastal permit requirements. This notice is required because the development sites are within 100 feet of a freshwater marsh.

4. Where development under this exclusion is conditioned upon conformity with the Environmental Resource Management Recommendations set out in Chapter III of the Sonoma County Coastal Plan, those "recommendations" shall be implemented as mandatory requirements.
5. Local Government Compliance with Exclusion Order:

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The order granting a categorical exclusion for these categories of development in the Central Coast Region, pursuant to Public Resources Section 30610, shall not become effective until the Executive Director of the State Coastal Commission has determined in writing that the local government has taken the necessary action to carry out the exclusion order pursuant to Section 13244 of the Coastal Commission regulations.

6. This exclusion shall apply to the permit requirements of the Coastal Act of 1976, pursuant to Public Resources Code Section 30610(a) and 30610.5(b), and shall not be construed to exempt any person from the permit requirements of any other federal, state or local government agency.
7. Development under this exclusion shall conform with the County of Sonoma zoning ordinances in effect on the date this exclusion is adopted by the Commission or to the terms and conditions of this exclusion where such terms and conditions specify more restrictive development criteria.

8. Any amendment to the certified Local Coastal Program which affects the land areas to which this exclusion applies shall require the approval of the California Coastal Commission pursuant to Commission Regulations and the Coastal Act of 1976 (Public Resources Code Section 30514).
9. Any development not falling within this exclusion remains subject to the regular permit requirements of the Coastal Act of 1976.

V. RESCISSION AND REVOCATION

Pursuant to Title 14 of the California Administrative Code Section 13243(e), The Commission hereby declares that the order granting this exclusion may be rescinded at any time, in whole or in part, if the Commission finds by a majority vote of its appointed membership after public hearing that the terms and conditions of the exclusion order no longer support the findings specified in Public Resources Code Section 30610(e). Further, the Commission declares that this may be revoked at any time that the terms and conditions of the order are violated.

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PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

APPENDIX J: HISTORIC RESOURCES INVENTORY September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX J: HISTORIC RESOURCES INVENTORY

Feature	Location	Ownership	Description
Sea Ranch North			
Del Mar	West of Highway 1 in The Sea Ranch at Del Mar Landing	Private	This gable roof board and batten cottage is one of the few remaining buildings that was the town of Del Mar, a lumber town. The roof has a rarely found shingle pattern in that shingles are very long. Adjacent are barns and evidence of a lumber mill and moorings.
Sea Ranch South			
Sea Ranch stable and barn	West of Highway 1 in The Sea Ranch	Private	The Sea Ranch stable barn has a wide gable roof and is topped with two large ventilators. The sides are vertical boards and the south gable end, which appears to have been replaced, is horizontal siding. Estimated construction date: 1905.
Sea Ranch barn and cottage	West of highway 1 at Black Point near The Sea Ranch Lodge	Private	The house and barn are deteriorating but are an important part of The Sea Ranch landscape. The house has vertical board and batten siding and long wood shingles on the roof and centered porch. The large barn has the same exposed shingle roof over the entire structure. The siding is vertical redwood. Estimated construction date: 1890.
Condominium I	End of Sea Walk Drive, The Sea Ranch	Private	Condominium I includes ten units designed by Moore, Lyndon, Turnbull and Whitaker in Sea Ranch Modern, forerunner of this style of architecture in the United States. Construction date: 1965.
Espherick Cluster House	Black Point Reach, The Sea Ranch	Private	One of the Espherick cluster houses, first detached residential units at Sea Ranch. Hedge Row housing related to cypress windbreak, Construction date: 1965.
Stewarts Point / Horseshoe Cove			
Stewarts Point Post Office	Highway 1 and Skaggs Springs Road, Stewarts Point	Private	The Post Office building and cluster of houses appear to be built at various times and date from 1890 to 1920, but are similar with gable roofs, are small and painted white.
Stewarts Point Store	Highway 1 and Skaggs Springs Road, Stewarts Point	Private	The general merchandise store is a two story Greek Revival building painted blue with white trim and horizontal shiplap siding. The gable roof has a broken pediment. There are six symmetrically placed windows at the front and rear. Construction date: 1868.
Stewarts Point Hotel and Barns	Highway 1 and Skaggs Springs Road, Stewarts Point	Private	This group of buildings appears to range in date from 1870 to 1900. The hotel has two buildings, the one to the west appearing older because of the wider shiplap siding. The salt box barn to the south is an excellent example, with long shingles on the gable roof and vertical unpainted siding. These and various barns and outbuildings, along with the adjacent store building and one-room school, demonstrate every facet of rural Greek Revival architecture and are the first example of a small rural complex in Sonoma County.

Feature	Location	Ownership	Description
Stewarts Point / Horseshoe Cove (cont.)			
Stewarts Point School	West of Highway 1, south of Stewarts Point	Private	The Stewarts Point School is an excellent example of the one-room Greek Revival schoolhouses that dotted Sonoma County before the turn of the century. The main gable roof and the two side gables have broken pediments, and a cupola with flagpole sits on the eave toward the front of the building. Estimated construction date: 1860.
Richardson House	29601 Highway 1	Private	This vernacular residence shows distinctive styles of the late nineteenth and early twentieth century. The wide, steep-pitched gable roof covers a square bay on the second floor and tall, narrow windows below. Various wings have been added. A small gable roof barn sitting in the rocks overlooking the ocean exemplifies the small sheep feeder barns in the region. Estimated construction date: 1900.
Kruse Barn and House	Highway 1 at Cannon Gulch	Public	The Kruse Ranch barn is a very large gable roof wood structure with vertical wood siding. A large portion of the roof collapsed in the last year. Across the road are two gable roof cottages. Estimated construction date: 1880.
Salt Point			
Plantation	34285 Kruse Ranch Road	Private	Plantation is a small town of gable roof structures built around San Andreas Fault sag ponds. The existing residence is a gable roof structure. Estimated construction date: 1870
Sawmill Teepee	31090 Seaview Road	Private	The sawmill teepee, remnant of a lumber mill, is believed to be the only remaining on in the Sonoma Coastal Zone.
Timber Cove / Fort Ross			
Stillwater Cove Ranch	22555 Coast Highway 1	Private	The house is a simple colonial style structure with gable roof and roof dormers. There are two stone buildings on the property and stone pillars at the entrance. The complex has been used as a boys' school but is currently operated as a guest ranch.
Fort Ross School	Stillwater Cove Regional Park, Highway 1	Public	The one-room school has recently been restored after being moved to its present site. The schoolhouse, constructed around 1885 at Fort Ross, is Greek Revival with simple, clean lines and precise detailing. It has horizontal lap siding and the distinguishing bell tower of a school. The Fort Ross School is Sonoma County Landmark No. 27.
Ocean Cove	23125 Coast Highway 1	Private	There are four structures on this site: A grocery store, barn and two houses. The store and the two houses are sided with long shingles. Estimated construction date: 1900.
Town of Fort Ross	20700 Coast Highway 1	Private	The town of Fort Ross has three gable roof houses with natural wood, horizontal siding. There is a large water tank between the houses and the cove. Estimated construction date: 1920.

Feature	Location	Ownership	Description
Timber Cove / Fort Ross (cont.)			
Plummer Graveyard	Highway 1 near Timber Cove	Private	Gravestones are located within a wood picket fenced area. Fence posts feature decorative top pieces. Also on the site are remnants of a log building. Estimated establishment date: 1860.
Residence	21085 Coast Highway 1	Private	Greek Revival house with horizontal siding and attached shed. The house has tall, narrow windows. Estimated construction date: 1890
Bufano Statue at Timber Cove Inn	Coast Highway 1, Timber Cove	Private	Large statue of a human figure with a hand affixed to the head, symbol of peace. made of mosaic by Italian sculptor Benny Bufano in 1960.
Sea View Ranch	27780 Sea View Road	Private	This gable roof barn has lean-to extensions on both sides. The walls are vertical unpainted redwood. Estimated construction date: 1900.
Eckert Ranch	18001 Coast Highway 1	Private	The ranch contains several red board and batten sheep barns with gable roofs along Highway 1. Estimated construction date: 1900.
Fort Ross Call Ranch	19005 Coast Highway 1	Public	The Call Ranch Home is a gable roof cottage with the oldest continuing weather station on the West Coast, starting in 1874. The ranch is part of the Fort Ross Historic Park.
Fort Ross Chapel	Highway 1, Fort Ross	Public	The chapel is one of the many fine structures presently in the compound of Fort Ross Park, with a domical roof and vertical siding. Originally built in 1825, it was rebuilt many times.
High Cliffs / Jenner			
Four Clapboard Houses	9081, 9089, 9095, 9101 Balboa Ave., Jenner	Private	These four gable cottages were built in 1904-05 and were homes to lumber mill workers for the Jenner lumber mill which operated from 1904 to 1914. The cottages, originally identical, have been altered over time.
Mill Cottage	9500 Balboa Ave	Private	Mill Cottage built in 1904 or 1905
Bungalow Residence	9440 Balboa Ave.	Private	Stepped into the hillside of a crag overlooking Jenner, this bungalow is two stories with a raised foundation and a hop and gable roof. A second story veranda with a solid balustrade wraps around three sides of the house. Estimated construction date:; 1904-05.
Double bunkhouse	9498 Pomo Ave.	Private	This residence once served as a double bunkhouse for lumber mill workers.
Bungalow Residence	10609 Highway 1 Jenner	Private	One story, gabled bungalow, with distinctive craftsman detailing in the stickwork trim of the gables, site on a raised foundation and has a porch extension facing the Russian River. Estimated construction date: 1910.
Bungalow Residence	9509 Pomo Ave. Jenner	Private	One story shingled bungalow with a gable roof and exterior brick chimney reflecting a craftsman influence. An enclosed porch extends across the gable end. The residence is situated on the side of Castle Crag overlooking Jenner. Construction date: 1904-05

Feature	Location	Ownership	Description
High Cliffs / Jenner (cont.)			
Board and Batten Structure	Willig Drive and Riverside Drive, Jenner	Private	Two and a half story gabled frame building with board and batten siding stepped into the hillside.
Cottages	Willig Drive and El Camino, Jenner	Private	A row of derelict cottages are partially concealed by trees behind Murphy's Restaurant at the intersection of Willig Avenue and Highway 1.
Jenner School	Willig Drive, Jenner	Private	A gable roof, one story schoolhouse stepped into the hillside, the Jenner Schook has the shingle siding typical of the bungalow era. The gable façade facing Willig Avenue has shiplap siding. Construction date: 1904.
Mill Hospital	10483 Willig Drive	Private	This residence once served as the lumber mill hospital and was built 1904-05.
Mill House Bungalow	Willig Drive, Jenner	Private	Hip roof bungalow on raised foundation, two and a half stories, with shiplap siding, brick chimney, and a second story veranda. Construction date 1904-05.
Three mill cottages	10467, 10469, and 10471 Willig Drive, Jenner	Private	These three mill cottages have a prominent location at the intersection of Highway 1 and Willig Drive and were located across Willig from the lumber mill. They have been altered over the years. Construction date: 1904-05.
Duncans Mills			
Sheep Ranch	26600 Highway 116	Private	A cluster of sheep ranch building which includes two gable roof barns, one with vertical siding and another particularly find barn with board and batten siding, a gabled L-shape farmhouse and several frame outbuildings. Estimated construction date: 1880.
Greek Revival Residence	Duncans Mills	Private	The one and a half story residence sits on a hillside overlooking Duncans Mills. It has a gable roof and sits on a raised foundation. The shed roof porch supported by four square posts has a fine turned balustrade. Estimated construction date: 1878
Hip Roof Cottage	Duncans Mills	Private	A one story cottage with a hip roof and shiplap siding, it has a shed roof porch, supported by square posts extending the length of the front of the building. The cottage is adjacent to an avenue distinguished by large cypress and eucalyptus trees. Construction date: 1880
Dentist office	Main Street, Duncans Mills	Private	A one story gable roof cottage with a front porch which extends the length of the front of the building and is supported by four wood posts. The cottage was removed from its original location near the Russian River in the area called Pig Allen after the 1906 earthquake. Estimated construction date: 1880.
The Jeweler	Main Street, Duncans Mills	Private	A one and a half story gable roof building with an Italianate false front, the building is unusual in that the false front is attached to the non gable side. The elaborate cornice has a paneled frieze, pierced and scrolled brackets and dentils. Estimated construction date: 1877.

Feature	Location	Ownership	Description
Duncans Mills (cont.)			
DeCarly General Store	B Street, Duncans Mills	Private	Two commercial false fronts are joined by a third smaller building to form a continuous commercial streetscape that is virtually unaltered. The frame buildings have gable roofs, shiplap siding, and stepped false fronts. A 1920's gas pump is located in front. Estimated construction date: 1888.
Country Store	Main Street, Duncans Mills	Private	A one-and-a-half story frame building with shiplap siding, a gable roof, and a false front attached to the gable end, the building occupies the corner of Main and B Streets. Attached to the rear of the building is a two-story gable roof building which appears to have served as a barn or stable on the first floor with quarters on the second floor. The two buildings form an L shape. Estimated construction date: 1880.
Duncans Mills School	Near B St., Duncans Mills	Private	The schoolhouse is a one-story rectangular frame building with a gable roof and an open, square bell tower above the entrance in the gable end. Siding is channel rustic. The schoolhouse is in an open field near the original road, now closed, that once swept around the outer perimeter of Duncans Mills. Estimated construction date: 1885.
Duncans Mills Depot	Highway 116, Duncans Mills	Private	The depot is a recently restored frame building with a central core and open waiting platform area sheltered under a hip roof. The open waiting area roof overhang is supported by square posts. Stick style influence is evident. Date constructed: 1910.
The Slaughterhouse	Duncans Mills Campground	Private	A rectangular frame building, one story in height, with a metal gable roof. Vertical board siding is of single-wall construction. In the gable end is a door of vertical boards and the legend "The Slaughterhouse, Vic Pedroia, Prop.".
Moscow Mill Pond	22855 Moscow Road	Private	A 19th century mill pond believed to be one of the earliest in Sonoma County.
Moscow Barn Casini Ranch	22855 Moscow Road	Private	A two-story gabled barn with gabled dormers and shiplap siding. There have been considerable alterations with the addition of windows, verandas, and interior remodeling. Estimated construction date: 1890.
Willow Creek State Beach			
Greek Revival Farmhouse	Willow Creek Road	Public	This farm cluster includes a Greek Revival farmhouse, gabled barn and several outbuildings. The farmhouse is two stories. The central doorway has a transom; the pedimented frame porch appears added. Estimated construction date: 1900.
Farmhouse Barns	Willow Creek Road	Public	This farm cluster includes a one-story farmhouse, two barns, and frame outbuildings. The farmhouse carries craftsman stick details and is in an L-shape form with a gabled roof and narrow, horizontal siding. Estimated construction date: 1910.

Feature	Location	Ownership	Description
Willow Creek State Beach (cont.)			
Farmhouse	Willow Creek Road	Private	This farmhouse and cluster of ranch buildings are located in a small valley at the edge of the redwoods. The farmhouse is two stories on a raised foundation with a hip and gabled roof and shiplap siding. A partially-enclosed porch wraps around two sides. Estimated construction date: 1890.
Bridgehaven Resort	Highway 1 and Russian River	Private	The resort includes a cluster of three gable roof cottages and a garage. The cottages are one-story with exposed rafters, narrow horizontal siding, interior brick chimneys and sash windows. The two-story gable roof garage is stepped into the hillside. Estimated construction date: 1925.
Sheep Ranch	9275 Highway 1 South of Jenner	Public	A gabled one-story cottage with channel rustic and vertical siding is the ranch house for this sheep ranch which has adjacent gabled frame barns with vertical wood siding. Estimated construction date: 1910.
Ranch	Highway 1, Ocean View	Private	A ranch cluster with a two-story, gabled structure with a saltbox form and a one-story gabled shed. Estimated construction date: 1910.
Water Tower	Cliff Avenue, Ocean View	Private	A water tower raised to an unusual height, has a wood tank on a frame tower.
Duncans Point Duncans Landing	Highway 1	Public	Landscape feature and site of early lumbering, shipping operations
Mann Ranch	Highway 1 and Scotty Creek	Private	This scenic farm complex includes what may have been the oldest frame building in Sonoma County.
Bodega Bay			
Greek Revival Residence	McChristian Avenue, Salmon Creek	Private	A two-story Greek Revival clapboard residence with an interior brick chimney at the gable end. The front entrance is in the non-gable facade facing the original roadway. Extensive greenhouse additions have been made as well as a one-story gabled addition with shiplap siding. The house sits on a knoll and is shielded by a cypress grove. Estimated construction date: 1860.
Carrington Ranch	Coleman Valley Road and Highway 1	Private	High on a knoll surrounded by a cypress windbreak is this two-story Greek Revival clapboard residence. The main non-gable facade faces the ocean. A two-story water tower with a hip roof, a large gable roof frame barn, and outbuildings are adjacent to the house. Estimated construction date: 1860.
Queen Anne	Bay Flat road, Bodega Bay	Private	A Queen Anne corner tower with a tent roof transforms this hip roof bungalow into a more formal residence, unique in Bodega Bay. One story with shiplap siding, the house rests on a raised foundation typical of seaside residences.

Feature	Location	Ownership	Description
Bodega Bay (cont.)			
"Marin"	Bay Flat Road and Whaleship Road	Public	A derelict 1920's California river boat, the "Marin" is beached just off Bay Flat Road. The boat carried a two-story superstructure with a pilot house and had a shallow draft.
Bodega Bay Union Church	Bay View Road, Bodega Bay	Private	Craftsman church similar in size and scale to craftsman bungalow cottages in Bodega Bay. The gabled roof has exposed rafters and gable trim. Wood siding is narrow and horizontal. A gabled portico and gabled wing extend from one side. In front is a square bell tower. Estimated construction date: 1910.
Craftsman Bungalow	Bodega Avenue and Kent Avenue	Private	A one-story craftsman bungalow with the characteristic gently pitched double gables exposed rafters and purlins, and a large gable sheltering a front porch. Estimated construction date: 1915.
Ghislini House	1215 Highway 1, Bodega Bay	Private	Stepped into the steep hillside beneath Highway 1 is this one-story hip-roof bungalow surrounded by cypress trees overlooking the bay. A gabled wing projecting toward the water is flanked by side and front porches and an enclosed sun porch beneath a shed roof. Construction date: 1917.
Medley Shop Antiques	Highway 1 and Windy Lane	Private	An excellent example of a craftsman bungalow, two stories, stepped into the hillside. It carries a low-pitched gable roof with exposed rafters, a strong central front gable with split columns and detailed craftsman windows. Estimated construction date: 1915.
Woodhaven	Highway 1 and Windy Lane	Private	Woodhaven, the seaside residence of the Wood family, a prominent Sonoma County family, is one-and-a-half stories with a gabled roof and projecting gable dormer. Balconies extend to each side of the dormer. The house sits on a raised foundation on a knoll overlooking the harbor and is surrounded by a picket fence. Estimated construction date: 1910.
Queen Anne Bungalow	Highway 1, Bodega Bay	Private	A hip roof bungalow with a projecting gable reflecting the Queen Anne style, this one-story house extends over the water on pylons. A distinguishing feature is the two-story water tower with a hip roof on the hillside above the house. Estimated construction date: 1910.
Meredith's Fish Company	Highway 1, Bodega Bay	Private	Functional gable roof industrial frame building on a wharf extending into Bodega Bay, central to the commercial fisheries district. Varying roof levels and siding indicate a number of add-on stages. Estimate construction date: 1920
Gas Station	Highway 1, Bodega Bay	Private	In the style of a hip roof bungalow, common to seaside communities of the 1920's, this one-story building, once serving as a gas station, has a low-pitched hip roof with exposed rafters extending over a drive-through area. Estimated construction date: 1920.

Feature	Location	Ownership	Description
Bodega Bay (cont.)			
Greek Revival Residence	Highway 1 and Bay Hill Road	Private	A one-and-a-half story Greek Revival house with its non-gable main facade to the highway. The gable roof has a boxed cornice and plain frieze. A shed roof porch extends the length of the front of the building supported by plain square posts. Siding is clapboard. Estimated construction date: 1875.
Farm	19000 Highway 1	Private	A farm cluster with a one-and-a-half story, gable roof farmhouse, a gabled frame barn and several frame outbuildings. The house has clapboard gables and vertical frame siding on the non-gable main facade, with a partially enclosed porch. Estimated construction date: 1875.
Valley Ford			
Greek Revival Farm	18300 Highway 1	Private	A cluster of 19th century farm buildings including a Greek Revival farmhouse, a small gabled vertical frame barn and a grove of eucalyptus trees. The farmhouse has a T-shape with a two-story gable wing facing the road. Estimated construction date: 1875.
Greek Revival Farm	1600 Valley Ford Freestone Road	Private	Greek Revival farm with a residence, barn, outbuildings, and wood bridge over creek.
Dinucci's Italian Dinners	Valley Ford Road, Valley Ford	Private	A two-and-a-half story square building with a hip roof and gables displaying the decorative shingles characteristic of the Queen Anne style. The first floor has been enlarged with the enclosure of a porch. Estimated construction date: 1905.
Bungalow Dairy	Valley Ford Estero Road	Private	A one-and-a-half story bungalow with a hip roof and shed dormers which is the farmhouse for a dairy ranch. The frame house has a front porch extending the length of the house supported by turned columns. Clustered near the bungalow are three gable roof barns, several outbuildings, and a round tower. Estimated construction date: 1910.
Valley Ford Market	14400 Highway 1, Valley Ford	Private	A one-story rectangular brick building with a stucco surface and a flat roof, the market had a curvilinear false front added about 1930. The painted mural on the false front commemorates the Running Fence. Estimated construction date: 1895.
Fire Department Tank and Frame Garage	14445 Highway 1, Valley Ford	Public	Behind a gable roof metal building housing the present volunteer fire department equipment stands a water tank. The tank, an exposed wood cask, sits on a raised frame platform. A fire siren rises above. To one side is a shed-roof building with two bays and siding of vertical board.
Frame False front	14390 Highway 1, Valley Ford	Private	Adjacent to the west side of Valley Ford Market is a one-story gable roof false front building with channel rustic siding. Characteristic of the earliest false front frame buildings, it is one-room wide with a central door in the false front. Estimated construction date: 1880.

Feature	Location	Ownership	Description
Valley Ford (cont.)			
Bank of America	14435 Highway 1, Valley Ford	Private	A one-story masonry building with neo-classical influence, the Dairyman's Bank suffered damage in the 1906 earthquake and has been subsequently remodeled. In front of the brick facade is a stepped parapet concealing a flat roof. A sign carried the legend, "1893 - the Dairyman's Bank - 1914". Estimated construction date: 1893.
Sandy's	14415 Highway 1, Valley Ford	Private	A two-story gable roof building with its non-gable facade to the road, the hotel has a channel rustic siding and a porch extending the length of the front. Six posts support the low hip roof of the porch which has a raised foundation. Estimated construction date: 1870.
Hip Roof Bungalow	14405 Highway 1, Valley Ford	Private	A one-story residence on a raised foundation with a hip roof and channel rustic siding. The front porch is sheltered under the main hip roof. Porch posts are square with sawn and pierced brackets. Estimated construction date: 1900.
Greek Revival Residence	14380 Highway 1, Valley Ford	Private	Facing the Valley Ford Road is this one-and-a-half story gable roof residence with its gable end to the road. To the rear are several additions. Estimated construction date: 1875.
Italianate Residence	14395 Highway 1, Valley Ford	Private	An Italianate influence is seen in the windows and door of the one-and-a-half story gable roof cottage with channel rustic siding. A porch partially extends across the front. It is supported by distinctive turned columns with intricate brackets, bracket extensions, and decorative button detailing on the columns and column bases. Estimated construction date: 1875.
Shingle Bungalow	14350 Highway 1, Valley Ford	Private	A one-and-a-half story shingled bungalow with a hip roof dormer, the residence sits on a raised foundation which is sheathed with narrow horizontal siding. To the rear is a shingled water tower with a hip roof finial and a large frame gable roof barn. Estimated construction date: 1910.
Greek Revival Cottage	14220 Highway 1, Valley Ford	Private	A one-and-a-half story Greek Revival cottage which reflects several distinctive architectural influences of the mid-19th century, including board and batten siding and a hip roof porch. Estimated construction date: 1870.
Greek Revival Cottage	14210 Highway 1	Private	This one-and-a-half story residence has channel rustic siding and quoins at the corners. A carved and sawn sunburst panel marks the gable end. A gable roof portico over the front entrance is supported by square posts. Estimated construction date: 1880.
Eucalyptus Windbreak	Valley Ford, Petaluma Road	Public	Eucalyptus windbreak along the road. Estimated planting date: 1900.

Feature	Location	Ownership	Description
Valley Ford (cont.)			
Soil Conservation Service Building	School Street, Valley Ford	Public	A one-and-a-half story building, with Spanish Colonial Revival influence, with a raised foundation, the former school was built into a hillside. The hip roof has a central gable over the main entrance with its round-arched entryway. Siding is stucco with a concrete and stucco staircase. Estimated construction date: 1920.
Hip Roof Queen Anne Cottage	14460 School Street, Valley Ford	Public	A one-story cottage with a steep hip roof, a Queen Anne influence is visible in the pedimented gable with its decorative shingles. Siding is channel rustic. Estimated construction date: 1900.
Bridge	Middle Road near Valley Ford	Public	A timber and iron bridge over the Estero Americano marking the boundary between Sonoma County and Marin County.
Christo's Running Fence	Main Street, Valley Ford	Private	Pole No. 7-33 is a 21-foot steel pole with small portions of steel cable and guy wires used in the construction of the Christo Running Fence in September, 1976. On opposite sides of the pole are two steel monuments displaying two bronze plaques. This site is Sonoma County Historic Landmark No. 24.

LOCAL COASTAL PLAN

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PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

INTRODUCTION September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

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INTRODUCTION

1. AUTHORITY AND PURPOSE

1.1 Authority for and Administration of Local Coastal Plan

1.1.1 California Coastal Act

The California Coastal Act (Public Resources Code Section 30000 *et seq.*; Coastal Act) was passed by the State Legislature in 1976 and became effective on January 1, 1977. The Coastal Act replaced the original Coastal initiative, Proposition 20, passed in 1972. The Coastal Act transferred the responsibility of preparing a Local Coastal Program (LCP; consists of a Local Coastal Plan and an Implementation Plan) from the State and Regional Coastal Commissions to each of the 15 counties and 53 cities along the California Coast. Each jurisdiction is responsible for developing an LCP that covers a 20-year planning period and which brings local government plans and regulations, as well as those of all public agencies, into conformance with Coastal Act policies. The Coastal Act requires that LCPs be reviewed and updated every five years.

The purpose of this Local Coastal Plan Update is to retain existing land use designations certified by the California Coastal Commission, and to revise the Local Coastal Plan to reflect policies related to coastal development that were adopted by the Sonoma County Board of Supervisors in General Plan 2020. In addition, this Local Coastal Plan Update adds new information and policy in the following areas: sea level rise (2100 planning horizon), biotic resources, geologic hazards, water quality, and public access. The document has been re-organized to reflect General Plan 2020 format and includes previously certified Appendices, including the Housing Element, Right-to-Farm Ordinance, Historic Resources Inventory, and development guidelines specific to The Sea Ranch. This updated Local Coastal Plan considers growth on the Sonoma County Coast as projected considering continuation of historic population growth and anticipated increases in visitor-serving uses. Build-out is projected based on the continuation of existing zoning land use, density, and minimum parcel size for the period 2015 to 2035.

Below are the Sections of the California Coastal Act which state the Legislative findings and declarations regarding the goals of the State of California, for the Coastal Zone, ecological balance and economic development in the Coastal Zone, and the necessity of continued planning and management.

30001. Legislative findings and declarations; ecological balance.

The Legislature hereby finds and declares:

- (a) That the California coastal zone is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem.*
- (b) That the permanent protection of the state's natural and scenic resources is a paramount concern to present and future residents of the state and nation.*
- (c) That to promote the public safety, health, and welfare, and to protect public and private property, wildlife, marine fisheries, and other ocean resources, and the natural environment, it is necessary to protect the ecological balance of the coastal zone and prevent its deterioration and destruction.*
- (d) That existing developed uses, and future developments that are carefully planned and developed consistent with the policies of this division, are essential to the economic and social well-being of the people of this state and especially to working persons employed within the coastal zone.*

30001.2. Legislative findings and declarations; economic development.

The Legislature further finds and declares that, notwithstanding the fact electrical generating facilities, refineries, and coastal-dependent developments, including ports and commercial fishing facilities, offshore petroleum and gas development, and liquefied natural gas facilities, may have significant adverse effects on coastal resources or coastal access, it may be necessary to locate such developments in the coastal zone in order to ensure that inland as well as coastal resources are preserved and that orderly economic development proceeds within the state.

30001.5. Legislative findings and declarations; goals.

The Legislature further finds and declares that the basic goals of the state for the coastal zone are to:

- (a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.*
- (b) Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state.*
- (c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.*
- (d) Assure priority for coastal-dependent and coastal-related development over other development on the coast.*

- (e) *Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.*

30004. Legislative findings and declarations; necessity of continued planning and management.

The Legislature further finds and declares that:

- (a) *To achieve maximum responsiveness to local conditions, accountability, and public accessibility, it is necessary to rely heavily on local government and local land use planning procedures and enforcement.*
- (b) *To ensure conformity with the provisions of this division, and to provide maximum state involvement in federal activities allowable under federal law or regulations or the United States Constitution which affect California's coastal resources, to protect regional, state, and national interests in assuring the maintenance of the long-term productivity and economic vitality of coastal resources necessary for the well-being of the people of the state, and to avoid long-term costs to the public and a diminished quality of life resulting from the misuse of coastal resources, to coordinate and integrate the activities of the many agencies whose activities impact the coastal zone, and to supplement their activities in matters not properly within the jurisdiction of any existing agency, it is necessary to provide for continued state coastal planning and management through a state coastal commission.*

1.1.2 Local Coastal Programs

The California Coastal Act requires each local government lying, in whole or in part, within the Coastal Zone to prepare a "Local Coastal Program" for that portion of the Coastal Zone within its jurisdiction. Local Coastal Programs (LCPs) are basic planning tools used by local governments to guide development in the Coastal Zone, in partnership with the Coastal Commission. LCPs contain the ground rules for future development and protection of coastal resources. The LCPs specify the appropriate type, location, and scale of uses of land and water and applicable resource protection and development policies. Each LCP includes a "Land Use Plan" (LUP) and an "Implementation Plan" (IP) setting forth measures to implement the plan (such as zoning or ordinances). Prepared by local government, these programs govern decisions that determine the short-term and long-term conservation and use of coastal resources. While each LCP reflects unique characteristics of individual local coastal communities, regional and statewide interests and concerns must also be addressed in conformity with Coastal Act goals and policies. Following adoption by a city council or county board of supervisors, an LCP is submitted to the Coastal Commission for review for consistency with Coastal Act requirements.

This Local Coastal Plan is the “Land Use Plan”, and the Coastal Zoning Ordinance is the “Implementation Plan” of the Sonoma County Local Coastal Program. Much of the existing Coastal Commission Certified Administrative Manual component of the Sonoma County Local Coastal Program has been incorporated into this updated Local Coastal Plan.

Goals and Policies

In adopting the California Coastal Act, the legislature declared that its basic goals were to:

- (1) Protect, maintain, and where feasible, enhance and restore the overall quality of the Coastal Zone environment and its natural and man-made resources.
- (2) Assure orderly balanced utilization and conservation of Coastal Zone resources taking into account the social and economic needs of the people of the state.
- (3) Maximize public access to and along the Coast and maximize public recreational opportunities in the Coastal Zone consistent with sound resource conservation principles and constitutionally protected rights of private property owners.
- (4) Assure priority for coastal-dependent and coastal-related development over other development on the Coast.
- (5) Encourage State and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the Coastal Zone.

The Coastal Act established a framework for guiding development and preserving sensitive resources in the Coastal Zone. Through its policies, it sets up a land use priority system which gives the highest priority to the preservation and protection of environmentally sensitive habitats and prime agricultural land and timberland. The Coastal Act states that the maximum amount of prime resource land shall be maintained in production, and that only resource dependent uses may be allowed in sensitive habitats. On shoreline lands which are not sensitive habitats or prime agricultural land or timberland, development which requires a site on or adjacent to the sea has the next priority. On lands not needed for any of the above, the next priority goes to public recreation and visitor-serving facilities. Private development is permitted after all these priorities have been considered. **Table C-INT-1** shows the priority of coastal land uses under the Coastal Act.

Table C-INT-1: Priority of Coastal Land Uses

High  Priority of Use  Low	Undeveloped areas		Developed areas
	Agriculture (Prime coastal dependent), forestry (productive timberland), coastal dependent public recreation [30213, 30241, 30242, 30243, 30250(a), 30250(b)].	Coastal dependent ¹ public recreation [30213, 30220, 30221]	Coastal dependent industry and commerce, commercial fishing, coastal dependent public recreation and special communities [30213, 30234, 30250(a), 30250(b), 302.53-5, 30255]
	Water dependent ¹ public recreation [30220, 30221, 30223]		
	Non-coastal ¹ or non-water dependent public recreation [30220, 30221]		
	Visitor-serving ¹ commercial recreation, lower cost [30222, 30213, 30250 (c)]		
	Visitor-serving ¹ commercial recreation, higher cost [30222, 30250 (c)]		
			Affordable, low, and moderate income residential, general industrial, or commercial development ² [30222, 30250, 30255]
Notes: ¹ Recreational uses of the coast that do not require extensive alteration of the natural environment have priority in intertidal and waterfront areas over recreational uses that would result in substantial alteration of the natural environment [30233, 30235, 30255] ² Concentration of development policies [30250(a)] limit development in rural areas, except public recreation and visitor-serving uses.			

1.1.3 Administration and Interpretation

After a Local Coastal Program has been certified by the Coastal Commission, coastal permitting authority over most new development is transferred to the local government, which applies the requirements of the Local Coastal Program in reviewing proposed new developments. The Coastal Commission retains permanent coastal permit jurisdiction over development proposed on tidelands, submerged lands, and public trust lands; and the Commission also acts on appeals from certain local government coastal permit decisions.

All land use and development decisions in the Coastal Zone must be consistent with the Local Coastal Program. In the Coastal Zone, the Local Coastal Program supersedes and takes precedence over other local plans, policies, and regulations. In authorizing coastal development permits after Local Coastal Program certification, the County must make the finding that the development conforms to the certified Local Coastal Program as well as all other findings required by the Coastal Zoning Ordinance.

The following general principles provide the framework for administration and interpretation of the Local Coastal Plan:

- (1) The policies of Chapter 3 of the California Coastal Act (California Public Resources Code Sections 30210 through 30264) shall guide interpretation of the Local Coastal Plan.
- (2) Where policies within the Local Coastal Plan overlap or conflict, the policy which is the most protective of coastal resources shall take precedence.
- (3) Prior to the issuance of any development permit required by the Local Coastal Plan, the County shall make the finding that the development meets the standards set forth in all applicable Local Coastal Plan policies and Coastal Zoning Ordinance regulations.
- (4) Prefacing discussion in text is intended as justification for the enumerated Local Coastal Plan policies and map designations. Therefore, the text shall be considered as the findings justifying the specified policies and Land Use and Open Space Map designations.
- (5) The policies contained herein bind the County's actions and establish the standard of review for determining whether land use and development decisions and zoning changes are consistent with the Local Coastal Plan.

1.1.4 Appeals

Certain types of development, as well as development within certain geographic areas that are acted on by the County after certification of the LCP, are appealable to the Coastal Commission (Public Resources Code Section 30603). These include:

- (1) Developments approved by the local government between the sea and the first public road paralleling the sea or within 300 feet of the inland extent of any beach or of the mean high tide line of the sea where there is no beach, whichever is the greatest distance.
- (2) Developments approved by the local government not included in the above, located on tidelands; submerged lands; public trust lands; within 100 feet of any wetland, estuary, stream; or within 300 feet of the top of the seaward face of any coastal bluff.
- (3) Development approved by the local government not included above that are located in a sensitive coastal resource area.
- (4) Any development approved by the local government that is not designated as the principal permitted use in the Coastal Zoning Ordinance.
- (5) Any development which constitutes a major public works project or a major energy facility (whether approved or denied by the local government).

1.2 History of the Local Coastal Plan

The process of preparing the Sonoma County Local Coastal Plan began in 1978, and from the beginning included strong citizen participation. Technical and Citizen Advisory Committees were established, with citizens appointed by the Board of Supervisors to assist staff in developing the Local Coastal Plan. Public meetings were held to discuss the major issues on the Sonoma County Coast, including shoreline access, transportation, harbor development, environmental protection, housing, and future development. Over several years the committees met and developed the Local Coastal Plan and policies with public input. During that time the California Coastal Commission retained review authority over all coastal development.

The Draft Local Coastal Plan was completed and adopted by the Board of Supervisors in May 1980, certified by the Coastal Commission in December 1980, and became effective in January 1981. However, adoption and certification of The Sea Ranch portion of the Local Coastal Plan was deferred due to disagreement about public access and pending litigation between the developer Oceanic and the Coastal Commission. Following resolution of these issues with a settlement agreement, the County developed the Land Use Plan for The Sea Ranch. In 1982 the Coastal Commission certified The

Sea Ranch portion of the Local Coastal Plan and the LCP implementation plan that included the Administrative Manual and the Coastal Zoning Ordinance.

In 1989 the County adopted a new General Plan, which directed the County to update and revise the Local Coastal Plan to be consistent with the new General Plan. In 1993, 1995, 1999, and 2001 the Coastal Commission certified amendments to the Local Coastal Plan, which adopted technical changes to ensure consistency with the General Plan. Minor corrections were made to the Land Use Plan and revisions were made to all chapters for internal consistency. In 2001 the Coastal Zoning Ordinance was changed significantly based on the format and style of the Countywide Zoning Ordinance, while retaining provisions that were specific to the Coastal Zone.

In 2001 the County started revising and updating the 1989 General Plan and simultaneously the Local Coastal Plan. The County's intent was to incorporate all pertinent policies of the updated General Plan into the updated Local Coastal Plan, and to develop the Sonoma County Local Coastal Plan as a document separate from the General Plan which specifically addresses the Sonoma Coast/Gualala Basin Planning Area, which includes the Coastal Zone. The primary purpose of the updated General Plan was to conduct a policy review which focused on specific issues that were of paramount importance to County communities. The broad purpose of General Plan 2020 is to express policies which will guide decisions on future growth, development, and conservation of resources through 2020 in a manner consistent with the goals and quality of life desired by County residents.

The County adopted Sonoma County General Plan 2020 on September 23, 2008. Accordingly, the Local Coastal Plan Update incorporates applicable General Plan 2020 goals, objectives, and policies; and includes objectives and policies unique to the Coastal Zone and the larger Sonoma Coast/Gualala Basin Planning Area.

2. REGIONAL AND LOCAL CONTEXT

2.1 Regional and Sonoma County Coast Setting

Sonoma County, the most northerly of the nine counties in the San Francisco Bay Region, is located along the Pacific coastline about forty miles north of San Francisco and the Golden Gate Bridge. The County is just over 1500 square miles, making it the largest of the nine Bay Area counties.

Sonoma County is bordered by the Pacific Ocean on the west; Marin County and San Pablo Bay to the south; Solano, Napa, and Lake Counties to the east; and Mendocino County to the north. Because of the geographic configuration and topography of the

North Bay area, transportation linkages to adjacent counties are limited to a few routes. The U.S. Highway 101 Freeway is the major north-south route, connecting Sonoma County to San Francisco and Marin Counties on the south and to Mendocino County on the north.

The Sonoma County Coastal Zone is a landscape of unsurpassed variety and beauty. Much of the area is encompassed within federal, state, and county parks, which provide habitat protection and opportunities for public recreation. The Coastal Zone also includes several small communities, productive agriculture areas, scattered residences, visitor serving commercial areas, and significant amounts of open space. The Sonoma County Local Coastal Program is designed to preserve the unique environment of the Coastal Zone and to encourage the protection and restoration of its coastal resources, while encouraging public enjoyment of its coastal recreation opportunities.

The Local Coastal Plan covers the area referred to in the Sonoma County General Plan as the Sonoma Coast/Gualala Basin Planning Area. The Planning Area runs the 40-mile length of the Pacific Coast margin from the Gualala River to the Estero Americano. In addition to several coastal communities, it extends inland to include Annapolis, Cazadero, Duncans Mills, Bodega, Freestone, Camp Meeker, and Occidental. Roughly paralleling the San Andreas Fault Zone, the rugged Sonoma Coast is a scenic area of regional, State, and National significance, with nearly vertical sea cliffs and sea stacks along the shoreline, dunes, marine terraces, coastal uplands, and headlands. In the north, the Gualala River South Fork extends inland into the coniferous forests of the western Mendocino Highlands.

The Coastal Zone portion of the Planning Area is 55 miles in length and extends inland generally 1000 yards from the mean high tide line. In significant coastal estuarine habitat and recreational areas it extends inland to the first major ridgeline paralleling the sea or five miles from the mean high tide line of the sea. The Coastal Zone boundary is generally 3000 to 12,000 feet inland from the shoreline, except around Duncans Mills, Willow Creek, and Valley Ford, where it extends up to five miles inland along the Russian River corridor and the Estero Americano.

The Sonoma Coast/Gualala Basin Planning Area is the most sparsely populated of the nine planning regions due to its relative remoteness and inaccessibility. The Sonoma County General Plan 2020 Land Use Element projects 3,283 new residents for the entire Planning Area however, population is expected to decline in the coastal zone. In 2018 and 2023 the populations are, an estimated 3,427 and 3,359 residents in the coastal zone, most occupants live in various small villages. (Permit Sonoma GIS Community Profile) Outside of these communities, rural settlement is very sparse. The region's

economy is primarily oriented to recreation and tourism, commercial fishing, timber production, and sheep ranching. Residences, originally planned as second homes, including The Sea Ranch and Bodega Harbor, are now increasingly occupied by permanent residents. In addition, many residences are also occupied as home based businesses. The greatest gains in employment are associated with the recreation and tourism industries.

2.2 History of Sonoma County Coastal Protection by Citizens

Sonoma County citizens have played a pivotal role in the establishment of the California Coastal Commission, and have been leaders in coastal protection.

In Northern California, contemporary awareness of the need for coastal protection began with the attempt by Pacific Gas and Electric Company (PG&E) in 1962 to build a nuclear power plant on Bodega Head. The project was defeated due to work by a local and statewide opposition and the presence of the San Andreas Fault on the site. PG&E abandoned the site and left the excavation for the nuclear reactor as a water-filled “Hole in the Head”.

In the mid to late 1960s, industrial projects, housing developments, and other projects which threatened the California coast began to multiply: 1) five additional power plant sites were proposed; 2) the mouth of the Russian River was to be dredged for gravel to construct Bay Area Rapid Transit (BART); 3) coastal wetlands were being filled or dredged for new marinas; 4) public views and access to beaches were eliminated due to construction of miles of beach houses along the Malibu coastline; 5) public access to 10 miles of the Sonoma County Coast were to be eliminated for The Sea Ranch second home development; 6) the City of Long Beach ruled that all new buildings along the most scenic coastal roadway be high-rise structures; and 7) the last straw, a blowout from an oil drilling platform off the Santa Barbara coast in January 1969. The result was a huge public outcry for greater protection of the California coast.

2.2.1 COAAST, Coastal Access Initiative, and Dunlap Bill

In 1968 activists in Sonoma County, challenged by The Sea Ranch precedent of privatization of the coast, had formed Californians Organized to Acquire Access to State Tidelands (COAAST).

They proceeded to mount the “Coastal Access Initiative” that would require public access whenever coastal property was developed. The initiative lost to a massive campaign investment by The Sea Ranch developers.

Two years later, Assemblyman John Dunlap was successful in passing Assembly Bill 493 (Dunlap Bill) that carried out the Coastal Access Initiative language for the whole state. Under the Dunlap Bill, no county shall approve either the tentative or final map of any subdivision fronting on the coastline or shoreline which does not provide or have available reasonable public access by fee or easement from the public highway to the ocean or bay shoreline.

2.2.2 Coastal Alliance and Proposition 20

The Coastal Access Initiative also caught the attention of Assemblyman Alan Sieroty, who with Assemblyman Dunlap came to Sonoma County to hold Assembly hearings on The Sea Ranch and to ask COAAST to organize statewide all the groups involved in coastal protection. Sonoma County's Bill Kortum of COAAST created a statewide network of coastal protection activists (the Coastal Coalition comprised of 12 environmental groups), which in 1970 advocated for a bill to establish a commission for the California coast. The Coastal Coalition morphed into the Coastal Alliance, comprised of 110 environmental groups interested in saving the California coast, chaired by Kortum.

In 1971 and 1972, Assemblymen Sieroty and Dunlap introduced Assembly Bill 1471 (AB 1471) to protect the entire California coast. Their idea was to introduce legislation to create a Coastal Commission to address statewide concerns for coastal protection. They advocated the equivalent of a State planning commission with the police power of zoning for the California Coast superseding local jurisdictions. Competing bills emphasized local rather than state control. For three years legislation passed through the State Assembly but not the Senate Committee. The heavy lobbying from the energy sector, California Real Estate Association, County Supervisors' Association, League of California Cities, and many others was effective in defeating the legislation calling for a Coastal Commission.

Recognizing that legislative efforts were going nowhere, the Coastal Alliance, with assistance from attorney Peter Douglas of Assemblyman Sieroty's staff and attorney Lew Reid, wrote a ballot initiative measure known as Proposition 20 (California Coastal Zone Conservation Act of 1972) containing the main language of Sieroty and Dunlap's AB 1471. Proposition 20 appeared on the November 7, 1972 ballot and was approved by voters.

The State Commission established by the measure had twelve members appointed equally by the Governor, the Senate, and the Assembly. Using the same appointment procedure, five coastal regional commissions were established to hold hearings and issue local permits. The State Commission was to serve as an appeals body for regional commission decisions. The State Commission, with input from the regional commissions,

was to develop a California Coastal Plan to be adopted by the California Legislature in 1976, at which time the Commission was to be made a permanent institution.

In 1976 the Legislature voted with a narrow margin to carry out the mandate of Proposition 20 with two significant additions. To satisfy local government, the Legislature mandated that coastal counties and cities develop a local coastal plan that met the criteria of the California Coastal Plan developed by the California Coastal Commission. The California Coastal Conservancy was created and appropriated money to buy coastal land and help develop trails and public access and conduct habitat restoration.

2.2.3 Coastwalk California

Coastwalk originated in 1985 at the instigation of longtime Sonoma County coastal activists Bill and Lucy Kortum. They proposed a trek along the Sonoma County Coast to draw awareness of public access and coastal preservation needs, and to publicize the fact that the California Coastal Act calls for a continuous coastal trail the length of California. That first Coastwalk was planned and led by Tom and Vivian McFarling, Sonoma County environmental activists. It was so popular that it was repeated again and became an annual event in Sonoma County, later spreading to other counties. By 1990 longtime Sonoma County volunteer Richard Nichols became Executive Director of Coastwalk, and with the help of his wife Brenda, Coastwalk grew and prospered, eventually putting on walks in each of the 15 California coastal counties.

In 2008 Coastwalk renamed itself Coastwalk California to reflect its statewide network. The Coastwalk California mission is "To ensure the right of all people to reach and responsibly enjoy the California coast. We are a California-wide non-profit organization that advocates for coastal protection and access via the California Coastal Trail and offers fun and educational walking tours." The Coastwalk California 2013 website states: "Today, with the help of dedicated volunteers, Coastwalk continues its legacy of thousands of people to the natural and human history of the spectacular California coastal landscape and helping to promote its conservation."

2.2.4 Sonoma Land Trust

The Jenner Headlands Preserve (formerly the Rule Ranch), acquired by the Sonoma Land Trust in December 2009, is 5,630 acres of a mosaic of redwood and Douglas fir forests, oak woodland, chaparral, and coastal prairie located north of the town of Jenner where the Russian River meets the Pacific Ocean. The property adjoins State Route 1 for 2.5 miles adjacent to Sonoma Coast State Park just north of the Russian River Estuary. Acquisition of the Jenner Headlands Preserve was financed by the Sonoma County Agricultural Preservation & Open Space District, California Coastal

Conservancy, California Wildlife Conservation Board, Coastal and Estuarine Land Conservation Program of the National Oceanic and Atmospheric Administration, Forest Legacy Program of the U.S. Forest Service, and private foundations. Ownership of the preserve was transferred to the Wildlands Conservancy in September 2013.

In 1997 and 2001, the Sonoma Land Trust, in partnership with the California Coastal Conservancy and Sonoma County Agricultural Preservation & Open Space District, acquired portions of the Estero Americano Preserve, over 120 acres surrounding the tidal estuary that forms the border between Sonoma and Marin Counties. Part of the Gulf of the Farallones National Marine Sanctuary, the Estero Americano Preserve is one of the most important biological areas on the northern California Coast. The Preserve contains a variety of habitat types, including coastal brackish marsh, freshwater seep, coastal prairie, perennial grassland, and northern coastal scrub; and is a key coastal area for numerous plant and animal species of concern.

2.2.5 Other Organizations

Other organizations that have been involved in coastal protection in Sonoma County include:

(1) Bodega Land Trust	(6) Sonoma County Conservation Action
(2) LandPaths	(7) Sonoma County Surfriders
(3) Save Penny Island	(8) Stewards of the Coast and Redwoods
(4) Save the Redwoods League	(9) Wildlands Trust
(5) Sierra Club	

2.3 Intergovernmental Planning Coordination

Sonoma County has a particular interest in coordination of land use, infrastructure, and environmental protection with other local, state, federal, and tribal governmental jurisdictions within the County. This Local Coastal Plan Update is generally compatible with the plans and policies of the nine cities and jurisdictions established by other government agencies. The County also acknowledges both the presence of federally-recognized tribal governments within Sonoma County, and the need for communication and coordination with federal and tribal governments, where development of tribal and non-tribal land is proposed and where tribes seek to acquire new trust land.

The Local Coastal Plan Update also considers the policies and concerns of adjacent counties and regional agencies, such as the San Francisco Bay Conservation and Development Commission, the Bay Area Air Quality Management District, the Northern

Sonoma County Air Pollution Control District, the Bay Area Water Quality Control Board, the North Coast Regional Water Quality Control Board, the Sonoma County Water Agency, the California Coastal Commission, the Coastal Conservancy, and others. The text of the various Elements notes those situations where these agencies have particular responsibilities that affect the physical development of the Sonoma County Coast and approval of permits.

2.3.1 Consultation and Coordination with Mendocino County

A travel website advertising the allure of the Mendocino and Sonoma County Coasts tells the reader that “Gualala” is a Native American word meaning “where the waters meet.” Indeed, the northern Sonoma Coast meets the southern Mendocino Coast at the Gualala River. The river estuary and mouth is the southern border of the Gualala town area, a year-round working community of several hundred residents that serves the retail needs of the surrounding region, known as “Mendonoma.” South of Gualala lay the Sonoma County communities of The Sea Ranch, Annapolis, Stewarts Point, Timber Cove, and Fort Ross. North of Gualala lay the Mendocino County communities of Anchor Bay, Point Arena, Manchester, Irish Beach, and Elk. Much is shared and linked across County lines in this region, from public services to commercial economies to Gualala River water quality issues. Therefore, it is necessary that Sonoma and Mendocino Counties consult and coordinate in implementation of their Local Coastal Plans.

Public Services. Law enforcement services in Mendonoma are provided by the Mendocino County and Sonoma County Sheriff’s Departments and the California Highway Patrol. Fire protection services are provided by local volunteer fire departments and the California Department of Forestry and Fire Protection. Redwood Coast Medical Services provides primary and preventative medical services and urgent care to the northern California Coast from Timber Cove north to Irish Beach in Mendocino County. Facilities consist of a main medical clinic in Gualala, dental and selected medical clinic in Point Arena, and counseling and outreach services at another clinic in Gualala that used to be in Stewarts Point. The Coast Life Support District is a special tax district charged with providing basic and advanced life support ambulance services and responding to calls involving including fires, vehicle accidents, hazardous materials incidents, and requests from law enforcement officers over 270 square miles in Sonoma and Mendocino Counties. High School students from The Sea Ranch and Stewarts Point in Sonoma County attend Point Arena High School in Mendocino County.

Economies. The economies of the northern Sonoma Coast and southern Mendocino Coast are interactive and inter-dependent, especially between The Sea Ranch and Gualala, based primarily on tourism and visitor support services, building trades, various

cottage industries, home-based enterprises using telecommuting technologies, forestry-related jobs, and real estate.

Gualala River. Most of the 40-mile Gualala River is in Sonoma County, but a portion is in Mendocino County. For its last few miles, it forms the boundary between the two counties. The river provides recreation; municipal and industrial water supply for the community of Gualala; drinking water for The Sea Ranch community; and wildlife habitat including cold freshwater habitat for migration and spawning of coho salmon and steelhead trout, two fisheries of concern in northern California.

The primary land uses in the Gualala River watershed are timber production and grazing. About 34 percent of the watershed is owned by timber companies. The main issues for the Gualala River and its tributaries are excess sedimentation and elevated water temperature. Logging and road construction/maintenance have greatly increased the amount of sedimentation in the river and its tributaries. A North Coast Regional Water Quality Control Board analysis in 2000 found that compared to natural sources, human activities account for about two-thirds of the sediment load in the watershed. The Gualala River Watershed Council in 2008 estimated that 85 percent of the human-caused sediment sources impacting the river result from improperly constructed/maintained timber and ranch roads. Logging in the watershed has also resulted in degradation of salmon and trout habitat as a result of removal of large streamside trees that provide shade, increasing water temperature; and reducing woody debris that creates spawning pools.

Today hillside vineyard development is becoming an increasing threat to water quality and fish habitat as more steep land is converted to vineyards, increasing the sediment load in the river; and stream flow is decreased as water from wells or shallow gravel aquifers connected to the river or its tributaries is used for vineyard irrigation in dry periods.

2.4 Adaptation to Change

On the Sonoma County Coast, change is both here and now and also lies ahead of us. It comes as a result of climate change in the form of progressive inundation and increased flooding of low-lying areas which contain some of our roads, trails and beaches, and commercial developments; and in the form of as yet undetectable changes in the kind of crops we can grow, our farming success, and the types of our natural habitats and their use by wildlife. It also comes in the shape of a significant downturn in the national, state, and local economies which has resulted in lost houses and jobs, increased unemployment and decreased wages, and lower quality of life. And

our state's demographics are changing - many of its cities and counties are rapidly aging, the inland areas are growing faster than coastal regions, and ethnic diversity is increasing. Our Sonoma County Coast will not be, look, or feel the same in 100 years.

With the release of our updated Local Coastal Plan comes the need for our communities to adapt to these changes and others we don't anticipate. As H.G. Wells said, "Adapt or perish, now as ever, is nature's inexorable imperative." As Charles Darwin said, "It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change." But according to Stephen Hawking, who is more representative of our technological age, "Intelligence is the ability to adapt to change." Therefore, more importantly than strength and humor, we will need intelligence to approach and adapt to these changes in our coastal natural, physical, social, and economic environments. And the future looks bright, because here in Sonoma County we have intelligence in our communities; an intelligence that will continue to grow and allow us to adapt; for as Wendy Carlos (an American composer and electronic musician) once said, "As human beings we do change, grow, adapt, perhaps even learn and become wiser."

3. ORGANIZATION AND OVERVIEW

3.1 Local Coastal Plan Format

The previous Local Coastal Plan consisted of the following 6 Chapters:

- (1) Historical
- (2) Environment and Hazards
- (3) Resources (Agriculture and Timber)
- (4) Recreation
- (5) Harbor
- (6) Development (Housing, Public Services, Transportation, Visual, Land Use)

This Local Coastal Plan Update consists of the following 9 Elements:

- (1) Land Use
- (2) Agricultural Resources
- (3) Open Space and Resource Conservation
- (4) Public Access
- (5) Water Resources

- (6) Public Safety
- (7) Circulation and Transit
- (8) Public Facilities and Services
- (9) Noise

Table C-INT-2 shows the Chapters and Sections of the previous Local Coastal Plan which correspond to the Elements of this Local Coastal Plan Update. For example, the Land Use Section of the Development Chapter of the previous Local Coastal Plan corresponds mainly to the Land Use Element but also to the Public Facilities and Services, Open Space and Resource Conservation, and Public Access Elements of this Local Coastal Plan Update.

Table C-INT-2: Correspondence of Previous Local Coastal Plan Chapters and Sections with Local Coastal Plan Update Elements

Previous Local Coastal Plan Chapter - Section	Local Coastal Plan Update Element(s) (primary Element - bold)
Development - Land Use	Land Use Public Facilities and Services Open Space and Resource Conservation Public Access
Development - Public Services	Public Facilities and Services Water Resources
Development - Transportation	Circulation and Transit
Development - Visual Resources	Open Space and Resource Conservation
Environment - Environmental Hazards	Public Safety Water Resources
Environment - Environmental Resources	Open Space and Resource Conservation
Harbor	Open Space and Resource Conservation Public Access
Historic Resources	Open Space and Resource Conservation
Recreation	Public Access
Resources	Open Space and Resource Conservation Agricultural Resources Water Resources Land Use Public Safety

3.1.1 SubAreas

The Sonoma County Coast has been divided into 10 SubAreas for ease of discussion and analysis in the Local Coastal Plan, particularly for the issues of land use, public access, and recreation:

(1) The Sea Ranch North	(6) The High Cliffs/Muniz-Jenner
(2) The Sea Ranch South	(7) Duncans Mills
(3) Stewarts Point/Horseshoe Cove	(8) Pacific View/Willow Creek
(4) Salt Point	(9) State Beach/Bodega Bay
(5) Timber Cove/Fort Ross	(10) Valley Ford

3.2 Local Coastal Plan Elements

3.2.1 Policies, Programs and Other Initiatives

A policy is a specific statement in text or a diagram guiding and implying clear commitment to an action. It is a mandatory declaration of an obligation intended specifically to govern the approvability of permit applications. This Local Coastal Plan includes “Other Initiatives,” which are non-binding and/or advisory statements of intent, encouragement, or pledges of support for specific endeavors, programs, or outcomes; and which may set guidelines and priorities for County actions. Programs as identified in this Local Coastal Plan are necessary or potential steps for implementation of the Local Coastal Program; for example, further study and development of plans of ordinances.

Policies bind the County’s actions and establish the standards of review for determining whether land use and development decisions, zoning changes, or other County actions are consistent with the Local Coastal Plan. Approved developments must be found consistent with all Local Coastal Plan policies. A development project’s demonstrated inconsistency with a Local Coastal Plan policy is the basis for denying a proposed development or appealing a permit action.

It is important to note that significant differences exist between the State General Plan law and the Coastal Act with respect to how policies are to be read and interpreted. For example, development projects are typically required to be found consistent on balance with an overall or comprehensive reading of the General Plan’s policies. In contrast, the Coastal Act requires that development projects in the Coastal Zone must be found to be consistent with all of the policies and standards of the Local Coastal Program, in this case the Sonoma County Local Coastal Plan and Coastal Zoning Ordinance.

This Local Coastal Plan incorporates those General Plan 2020 goals, objectives, and policies which are applicable to the Coastal Zone; and incorporates as policies the “Recommendations” in the previous Local Coastal Plan. In some cases, the wording of these policies has been revised for clarity and to accurately reflect the Coastal Zone, current County Policy, or new data and information. The Local Coastal Plan also includes new policies based on the requirements and recommendations of the California Coastal Commission, new data and information, and input received at the 2013 public workshops. The numbered “Recommendations” in the previous Local Coastal Plan which no longer reflect County policy have not been included in this Local Coastal Plan.

After each policy is a term in parenthesis that describes where it comes from and whether it has been revised:

GP2020	the policy is the same as in General Plan 2020
GP2020 Revised	the policy in General Plan 2020 has been revised
Existing LCP	the policy is the same as the Recommendation in the Existing Local Coastal Plan
Existing LCP Revised	the policy (Recommendation) in the Existing Local Coastal Plan has been revised
New	the policy is new
Coastal Commission	the policy is developed from published guidance provided by the Coastal Commission

3.2.2 Land Use Element

The previous Local Coastal Plan contained a chapter on “Development” that included a section on “Land Use.” This section has been incorporated into the Land Use Element.

In addition to the ten general goals and policies, the Land Use Element describes where the different kinds of uses for land may be established on the Sonoma County Coast, establishes the land use and density of properties on the Coast and shows them on Land Use Plan Maps, and presents policies specific to the Coast or particular SubAreas.

Visitor-Serving Commercial Facilities. This section identifies and describes the existing restaurants, overnight accommodations, auto service stations, grocery stores, and similar commercial uses for visitors by Coast SubArea; and presents policies for encouraging new and expanding existing visitor-serving commercial development where it can be accommodated with minimal impacts on coastal views and natural resources.

3.2.3 Agricultural Resources Element

The previous Local Coastal Plan contained a chapter on “Resources” that included a section on “Agricultural Resources.” This section has been incorporated into the Agricultural Resources Element.

The Agricultural Resources Element presents guidelines and policies that apply to lands designated in the Agriculture land use category. Policies address marketing of agricultural products, stabilization of agricultural use at the edge of urban areas, limitations on intrusion of residential uses, location of agricultural services and visitor-serving uses, provision of farmworker housing, streamlining of permit procedures for agricultural uses, and recognition of the aquaculture and horse industries as agricultural uses.

3.2.4 Open Space and Resource Conservation Element

The Open Space and Resource Conservation Element addresses scenic resources/design, biotic resources, soils, timber resources, mineral resources, energy resources, air quality, and commercial fishing and support facilities.

Scenic Resources. The 2001 Local Coastal Plan contained a chapter on “Development” that included a section on “Visual Resources.” This section has been incorporated into the “Scenic Resources” section of the Open Space and Resource Conservation Element.

The Scenic Resources/Design section includes maps of the Coast SubAreas showing the locations of designated Scenic Landscape Units, Vista Points, and Scenic Corridors. Scenic Landscape Units incorporate “Major Views”, established along with Vista Points in the previous Local Coastal Program and retained in this Local Coastal Plan Update. The section and the Coastal Design Guidelines present siting and design guidelines to protect coastal views and to minimize other visual impacts of development.

The eight types of natural landforms in the Coast’s rural areas are identified, and policies and design guidelines to preserve, retain, and enhance the character of these rural areas are presented. They call for preserving existing site features contributing to rural character, siting of buildings and development features to blend in with the surrounding landscape, and allowing certain rural design features in new development. Coastal design guidelines for specific landform types are also provided in **Appendix A** to minimize the visual impacts of new development.

This section also describes the visual characteristics of the major urban communities on the Coast. It presents both urban design guidelines specific to some of these

communities in order to retain and enhance their unique character, and general urban design guidelines for other urban development on the Coast.

Biotic and Other Natural Resources. The 2001 Local Coastal Plan contained a chapter on "Environment and Hazards" that included a section on "Environmental Resources", which has been incorporated into the "Biotic Resources" section of the Open Space and Resource Conservation Element. This section includes maps of the Coast SubAreas showing the locations of designated "Environmentally Sensitive Habitat Areas" (ESHAs), which include Riparian Corridors; and Biotic Habitat Areas, which include Sensitive Natural Communities and Special Status Animal and Plant Occurrences and Habitats. The previous Local Coastal Program established a hierarchy of environmental sensitivity for ESHAs; only the "Preservation" sensitivity designation is retained in the Local Coastal Plan Update. Policies in the Open Space and Resource Conservation Element address the protection of ESHAs. They also address the protection and preservation of other natural resources, including soils, timber resources, mineral resources, energy resources, and air quality.

Commercial Fishing and Support Facilities. The 2001 Local Coastal Program contained a chapter on "Harbor" which has been incorporated into the "Commercial Fishing and Support Facilities" section of the Open Space and Resource Conservation Element. The section contains policies for the protection and upgrading of facilities serving the commercial fishing industry, and for the protection of natural resources associated with dredging in Bodega Bay.

3.2.5 Public Access Element

The California Constitution provides that the public has the right-of-way to navigable waters, and the California Coastal Act carries out this provision. Policies of the Coastal Act state that the public has a right to maximum access to the shoreline and that development shall not interfere with that right. The policies also give priority to recreation and visitor-serving uses over all other uses except coastal dependent industry and agriculture, and promote enhancement of public and private recreation opportunities. The previous Local Coastal Plan contained a chapter on "Recreation" that has been incorporated into the Public Access Element.

The Public Access Element is divided into the following sections: Background, Public Access Facilities, Recreational Boating, and Visitor-Serving Commercial Facilities. The Background describes the legal basis for public access to the shoreline under the California Constitution, Coastal Act, Coastal Trail Act, and other guiding policy documents.

Public Access Facilities. This section is divided into sections on Facility Classification, Acquisition, Planning and Development, and Management and Operation. It describes in general the public and private parks, trails, and other recreational facilities on the Sonoma County Coast and includes maps showing the locations of these facilities.

The Facility Classification section describes the classification system for public access facilities - parks and preserves, regional trails, coastal access trails, and bikeways.

The Facility Acquisition section describes the methods, issues, and priorities for acquisition of public access facilities. Policies are presented for maximizing public access to and on the Coast; carrying out the Public Access Plan (**Appendix B**) as the primary policy for determination of park needs and acquisition of public access; minimizing adverse impacts of development on public access; requiring dedication of a public access easement or fee title as a condition of approval for new development on property containing a facility proposed in the Public Access Plan; protecting areas where public prescriptive rights to the coast may exist; acquiring property not included in the Public Access Plan standards for Offers to Dedicate and siting of public access facilities; and identifying, prioritizing, and developing the California Coastal Trail.

The Facility Planning and Development section describes how the Public Access Plan was developed and the standards on which it is based; and the considerations for planning and developing public access facilities. Policies are presented for carrying out the Public Access Plan as the primary policy for development of public access facilities; facility design and construction; trail surfaces and improvements; providing signs, restrooms, bicycle storage, and other amenities; providing adequate parking; providing campgrounds and overnight accommodations; and evaluating adverse impacts of facilities on people and the environment.

The Facility Management and Operation section describes the allowable uses of public access facilities and some issues associated with management and operation funding, maintenance, policing, and private fee access. Policies are presented for ensuring adequate operation and maintenance of public access facilities to protect natural resources and public safety.

Recreational Boating. This section identifies and describes the existing recreational boating facilities on the Sonoma County Coast and presents policies for providing adequate facilities at parks, harbors, and marinas.

3.2.6 Water Resources Element

The previous Local Coastal Plan contained a chapter on “Development” that included a section on “Public Services” with a subsection on “Water Supply.” This subsection has been incorporated into the Water Resources Element, a new Element developed in recognition of the importance of water to the environment, economic stability, agricultural protection, and overall quality of life of Sonoma County Coast residents. Policies address subjects such as surface water, groundwater, water conservation and re-use, public water systems, and water quality.

3.2.7 Public Safety Element

The previous Local Coastal Plan contained a chapter entitled “Environment and Hazards” that included a section on “Hazards,” which has been incorporated into the Public Safety Element.

Special limitations and procedures for review of development projects located in areas subject to natural hazards are included in the Element. Natural hazards addressed include seismic and other geologic hazards, landslide and erosion on unstable slopes, beach erosion and coastal cliff/bluff stability, flooding, sea level rise, tsunami, and wildland fire. Hazardous materials are also addressed.

3.2.8 Circulation and Transit Element

The previous Local Coastal Plan contained a chapter on “Development” that included a section on “Transportation,” which has been incorporated into the Circulation and Transit Element. Plans for the Sonoma County Coast’s future highway and transit systems are presented, with emphasis on State Route 1. The Element emphasizes an increased role for public transit in serving commute trips and the importance of measures which will allocate existing highway capacity more efficiently during peak travel periods. The Element recommends improvements to various intersections to increase the capacity and safety of State Route 1; and an increased role for pedestrian, bicycle, and other alternative transportation modes.

3.2.9 Public Facilities and Services Element

The previous Local Coastal Plan contained a chapter on “Development” that included a section on “Public Services,” which has been incorporated into the Public Facilities and Services Element. The various public facilities and services which may affect the future development of land on the Sonoma County Coast are emphasized in this Element, including water, wastewater treatment and disposal, parks and recreation, fire protection, law enforcement, and solid waste management. The Sonoma County Coast

is a water scarce area, and land conditions are poor for septic systems. Policies in this Element address this lack of basic services on the Coast, which limits development potential in most areas. The policies also address limitations to emergency medical and other health care services for the Coast's small population spread over large distances. Policies related to youth, family, and senior services are also included.

3.2.10 Noise Element

The previous Local Coastal Plan did not address Noise. The Noise Element evaluates existing and projected future noise conditions related to traffic on highways and major roads, heavy commercial and industrial activities, mineral extraction, solid waste landfills and transfer stations, and special events; and presents policies and standards to assure noise compatibility in future land development.

4. CITIZEN PARTICIPATION IN PLAN PREPARATION

Sonoma County encourages a high degree of public awareness of planning and development issues and participation by interested citizens in the preparation and consideration of planning policies. General Plan 2020, on which this Local Coastal Plan Update is largely based, was assisted by a Citizens' Advisory Committee (CAC) appointed by the Board of Supervisors that was responsible for reviewing and making recommendations on all issues and related policies that were included in the General Plan Update. In effect, the CAC directly participated in the drafting of the goals, objectives, and policies to be submitted for consideration by the Planning Commission and Board of Supervisors. During all phases of policy development, local residents, businesses, property owners, and interest groups were encouraged to express their views on planning issues and policies proposed for incorporation into General Plan 2020.

Public workshops on the Local Coastal Plan Update were held as follows:

July 14, 2015	County PRMD Hearing Room, Santa Rosa
July 7, 2015	Del Mar Center, The Sea Ranch
June 29, 2015	Bodega Bay Fire Station
June 24, 2015	Monte Rio Community Center
May 28, 2013	Del Mar Center, The Sea Ranch
June 5, 2013	Bodega Bay Fire Station
June 8, 2013	Jenner Community Center

5. ACKNOWLEDGMENTS (LOCAL COASTAL PLAN UPDATE AND GENERAL PLAN 2020)

5.1 Board of Supervisors

Mike Cale, Valerie Brown, Susan Gorin	1 st District
Mike Kerns, David Rabbitt	2 nd District
Tim Smith, Shirlee Zane	3 rd District
Paul Kelley, Mike McGuire, James Gore	4 th District
Mike Reilly, Efren Carrillo, Lynda Hopkins	5 th District

5.2 Planning Commission

Charlie Cooke, Dick Fogg, Greg Carr	1 st District
Don Bennett, Marcel Feibusch, Shawn Montoya	2 nd District
Nadin Sponamore, Lee Van Geisen, Jeff Civian, Lawrence Reed, Todd Tamura, Kathleen Doyle, Komron Shahhosseini, Paula Cook	3 rd District
Pam Alberigi, Dennis Murphy, Jason Liles, Komron Shahhosseini, Willie Lamberson, Tom Gordon, Aerial Kelley, Cameron Mauritson	4 th District
Rue Furch, Allen Siegle, Pamela Davis, Tom Lynch	5 th District

5.3 County Staff Team

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PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

LAND USE ELEMENT September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

LAND USE ELEMENT

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LAND USE ELEMENT

1. INTRODUCTION

1.1 Purpose

The Land Use Element, along with the other Elements of the Local Coastal Plan, together comprise the Land Use Plan as defined in Section 30108.5 of the California Coastal Act of 1976. The Land Use Plan provides policies that, together with the Land Use, Open Space, Hazards and Public Access Maps provide the land use designations indicating the type, location, and extent of land uses permitted in the Coastal Zone. For each appropriate land use category, it includes standards for residential density and building intensity.

Below is the section of the Coastal Act addressing Land Use Plans:

Section 30108.5

Land use plan. "Land use plan" means the relevant portion of a local government's general plan, or local coastal element which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies and, where necessary, a listing of implementing actions.

The County recognizes that the policies of the Local Coastal Plan represent a legislative balance between the individual rights of property owners and the requirements of the California Coastal Act. Decisions made pursuant to the Local Coastal Plan shall further community goals and objectives while not unconstitutionally abridging property rights.

The Local Coastal Plan incorporates the relevant General Plan policies into a single Land Use Plan for the Coastal Zone. Its goals, objectives, and policies are consistent with the Coastal Act and further define and guide permitted development on the Sonoma County coast. Sonoma County is blessed with a rugged 55-mile coastline, with expansive open spaces and recreational opportunities, extremely low population densities and rich natural resources that are protected by engaged residents, public ownership and the stewardship of the agricultural and timber industries. The Land Use Element provides the framework for land uses that serves to protect the abundant natural resources and provide for enhanced public access and recreation serving the greater community while balancing the needs of local residents, farmers and resource managers.

1.2 California Coastal Act

Most policies of the California Coastal Act relate in some degree to land use. Policies concerning protection of coastal resources, provision of public access and recreation, and encouragement of coastal-dependent uses, which directly affect land use decisions, are cited in other Elements of the Local Coastal Plan. All of these policies were evaluated in preparing this Land Use Element. The Coastal Act includes a framework for development on the coast, to protect coastal resources and maintain public access.

1.3 Sonoma County Coastal Setting

The Local Coastal Plan covers a portion of the area referred to in the Sonoma County General Plan as the Sonoma Coast/Gualala Basin Planning Area. The Sonoma Coast planning area is the most sparsely populated of the nine Sonoma County Planning areas. The Sonoma County coast runs the 55-mile length of the Pacific Coast from the Gualala River to the Estero Americano. The Coastal Zone includes several coastal communities and extends inland to include the communities of Duncans Mills and Valley Ford. Roughly paralleling the San Andreas Fault Zone, the rugged Sonoma Coast is a scenic area of regional, state, and national significance, with nearly vertical sea cliffs and sea stacks along the shoreline, dunes, marine terraces, coastal uplands, and headlands. In the north, the Gualala River South Fork extends inland into the coniferous forests of the western Mendocino Highlands.

Outside of the nine rural communities indicated in **Table C-LU-1**, settlement in the coastal zone is very sparse. The region's economy is primarily oriented to recreation and tourism, commercial fishing, timber production, and sheep ranching. Residences, originally planned as second homes, including The Sea Ranch and Bodega Harbor, are now often occupied by permanent residents. In addition, many residents utilize home offices. The greatest gains in employment in the Planning Area are associated with the recreation and tourism industries.

The population in the Coastal Zone was 3,690 and 3,385 residents in 2000 and 2010, respectively (U.S. Census). The population estimates for 2018 and 2023 are 3,427 and 3,359 residents (Permit Sonoma GIS Community Profile). This data reflects the loss of commercial fishing operations along the coast and may indicate a trend away from permanent residency towards vacation homes and tourism industry. Table C-LU-1 lists the 2010 population of nine communities in the Coastal Zone. In summer 2014 approximately 110 homes in the coastal zone were registered to pay Transient Occupancy Tax. By June of 2017 approximately 550 residences were registered,

indicating that the vacation rental industry has become an integral part of the tourist industry on the coast.

Table C-LU-1: 2010 Populations for Rural Communities

Community	2010 Population¹
Bodega Bay	1,077
Carmet	47
Duncans Mills	175 ²
Jenner	136
Salmon Creek	86
Sereno Del Mar	126
The Sea Ranch	1,305
Timber Cove	164
Valley Ford	147
Estimated Population Outside Community Boundaries	122
Total	3,385
Notes: ¹ 2010 Census ² 2000 Census (only available data)	

Between 2000 and 2014, 560 new residential units were constructed. Minimum lot sizes outside of rural communities range from 160 to 640 acres over most of the coast. The region's economy is primarily oriented to recreation and tourism, commercial fishing, timber production, and ranching. The Sonoma County General Plan 2020 Land Use Element for the Sonoma Coast planning region projects 3,283 new residents resulting in a total population of 11,700 by 2020 for the entire planning area, including inland portions. The greatest gains in employment would be those associated with the recreation and tourism, and professional services industries.

1.4 Relationship to Other Elements

The Land Use Element reflects the various goals, objectives, and policies of other elements of the Local Coastal Plan. The Elements are internally consistent because:

- (1) All Elements use the same population, housing, and employment projections.
- (2) The policies in the Land Use Element support policies in the other Elements.
- (3) The Land Use Maps and accompanying text represent a consciously selected balance among the various goals and objectives included in all of the Elements.

Site specific factors may result in a less intensive use or lower density than allowed by the Land Use Plan maps.

- (4) Where necessary, policies in other Elements are cross-referenced.

1.5 Scope and Organization

The Land Use Element consists of five sections – an Introduction, Land Use Policy, Community Policy, Visitor Serving Commercial Policy, and Affordable Housing Policy. The Land Use Policy section contains descriptions of the land use categories that are applied to the Land Use Maps for each of the ten Subareas of the Sonoma County Coast. The ten SubArea Land Use Maps (**Figures C-LU-1a to C-LU-1k**) show the applicable land use categories and maximum permitted residential densities. They are displayed at the end of the Land Use Policy section and are also available at the Permit Sonoma office and website.

The Land Use Maps and Land Use Policy, Community Policy, Visitor Serving Commercial Policy, and Affordable Housing Policy must be used together with the policies and maps of the other elements in order to fully understand the policies applicable to any particular situation. The Land Use Maps reflect the Goals, Objectives, and Policies of all of the Elements and on an evaluation of the natural and cultural characteristics of the lands along the coast.

Changes to the Land Use Maps, whether to change the land use category or permitted residential density, may be accomplished only through the Local Coastal Plan Amendment process, subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the California Coastal Act. Changes in land use or density must be consistent with the other elements and policies of the Local Coastal Plan and the designation criteria noted in each land use category below.

Applications for Local Coastal Plan Amendments may be filed with the County. However, if at any time the Director of Permit Sonoma determines that the proposed amendment is substantially inconsistent with Local Coastal Plan Goals, Objectives, or Policies or the policies of Chapter 3 of the Coastal Act, they may submit the application directly to the Planning Commission and Board of Supervisors for summary denial on policy grounds.

Where parcels that are the subject of a lot line adjustment are located in different land use categories or Local Coastal Plan designations, the following guidelines should be applied:

- (1) If the adjustment would result in a parcel having a split land use designation and split zoning of different densities and intensities of land use, require a concurrent

filing of a Local Coastal Plan Amendment to avoid the creation of new split land use/zoning parcels.

- (2) If the adjustment would not result in a parcel having a split land use designation and split zoning of different densities and intensities of land use, it may be determined to be consistent with the Local Coastal Plan through the coastal development permit approval process.
- (3) In processing the adjustment consider that no new adverse impacts may result from the adjustment or required concurrent amendment, if any.

2. LAND USE DESCRIPTION

2.1 Priority of Land Uses

The Coastal Act established a framework for guiding development and preserving sensitive resources in the Coastal Zone. Through its policies, it sets up a land use priority system which gives the highest priority to the preservation and protection of environmentally sensitive habitats and prime agricultural land and timberland. The Coastal Act sections 30241, 30243, and 30240 prioritize land uses in the coast. Resource uses are generally highest priority land uses, specifically regarding uses that maximize the amount of prime agricultural land in production, and the long-term productivity of timberlands. Additionally, only resource dependent uses may be allowed in environmentally sensitive habitat areas. Coastal-dependent development which requires a site on or adjacent to the sea has the next priority. Finally, opportunities for coastal recreation on suitable sites have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry (Coastal Act Section 30222).

The Local Coastal Plan establishes a prioritization of land uses, consistent with the Coastal Act as shown in **Table C-LU-2**. The Local Coastal Plan seeks to concentrate new development in already developed areas and avoid development in sensitive coastal resource areas.

2.2 Land Use Categories

The Local Coastal Program contains 13 base zone districts twelve land use categories in five general use categories. **Tables C-LU-3** shows the Local Coastal Plan Land Use categories and applicable Zones under the Coastal Zoning Ordinance.

Table C-LU-2: Priority of Coastal Land Uses

High ↑ Priority of Use ↓ Low	Undeveloped areas		Developed areas	
	Agriculture (Prime coastal dependent), forestry (productive timberland), coastal dependent public recreation [30213, 30241, 30242, 30243, 30250(a), 30250(b)].	Coastal dependent ¹ public recreation [30213, 30220, 30221]	Coastal dependent industry and commerce, commercial fishing, coastal dependent public recreation and special communities [30213, 30234, 30250(a), 30250(b), 302.53-5(e), 30255]	
	Water dependent ¹ public recreation [30220, 30221, 30223]			
	Non-coastal ¹ or non-water dependent public recreation [30220, 30221]			
	Visitor-serving ¹ commercial recreation, lower cost [30222, 30213, 30250 (c)]			
	Visitor-serving ¹ commercial recreation, higher cost [30222, 30250 (c)]			
			Affordable, low, and moderate income residential, general industrial, or commercial development ² [30222, 30250, 30255]	
Notes:				
¹ Recreational uses of the coast that do not require extensive alteration of the natural environment have priority in intertidal and waterfront areas over recreational uses that would result in substantial alteration of the natural environment [30233, 30235, 30255]				
² Concentration of development policies [30250(a)] limit development in rural areas, except public recreation and visitor-serving uses.				

Table C-LU-3: Land Use Categories and Applicable Zones

Land Use Category	Applicable Zones
Land Extensive Agriculture (LEA)	Land Extensive Agriculture (LEA)
Diverse Agriculture (DA)	Diverse Agriculture (DA)
Recreation (R)	Planned Community (PC) Resources and Rural Development (RRD)
Resources and Rural Development (RRD)	Resources and Rural Development (RRD)
Timber (T)	Timber Preserve (TP) Resources and Rural Development (RRD)
Open Space (OS)	Planned Community (PC) Rural Residential (RR)
Commercial Fishing (CF)	Commercial Fishing (CF)
Commercial Tourist (CT)	Commercial Tourist (CT) (formerly Visitor-Serving Commercial)
Commercial Services (CS)	Commercial Services (CS) (formerly Rural Services) Community Commercial (C2)
Public Facilities (PF)	Public Facilities (PF)
Rural Residential (RR)	Rural Residential (RR) Agriculture and Residential (AR) Planned Community (PC)
Urban Residential (UR)	Low Density Residential (R1) Medium Density Residential (R2) Planned Community (PC)

2.2.1 Land Use Definitions

Below are the definitions for the two categories of potential uses under each land use category:

Principally Permitted Uses: Principal Uses as described in the Coastal Zoning Code and consistent with the primary purpose of the land use category. All development within the Coastal Zone requires a discretionary Coastal Development Permit, unless exempt or otherwise categorically excluded by order of the Coastal Commission. Principally permitted uses are not appealable to the California Coastal Commission, pursuant to Section 30603(a)(4) of the Coastal Act, although such development is subject to review and permitting by the County and may be appealed to the County. Uses shall not be considered principally permitted if located within an environmentally sensitive habitat area or major view shed designated in the Open Space and Resource Conservation Element. All principally permitted uses are subject to site development standards. Outside of commercial land use designations all commercial uses that require a coastal development permit are appealable to the Coastal Commission.

Appeal Jurisdiction: The appeal jurisdiction area includes, but is not limited to: areas west of Highway 1, areas within 100 feet of a wetland, estuary or stream, and development located in a sensitive coastal resource area. Only resource-dependent uses may be permitted within an environmentally sensitive habitat area. All clearing of vegetation, grading, excavation, fill or construction are subject to the site development standards contained in the Open Space and Resource Conservation Element.

Other Permitted Uses: Land uses permitted or conditionally permitted in the Coastal Zoning Code not described as Principally Permitted Uses are secondary and subordinate to the principal permitted uses and must be compatible with principally permitted land use. It should be noted that the term "permitted uses" as used in the descriptions of the land use categories identify permissible uses consistent with the purpose of the land use category, subject to zoning and permitting requirements of the County. All development within the Coastal Zone requires a discretionary Coastal Development Permit, unless exempt or otherwise categorically excluded by order of the Coastal Commission. Any development that is not designated as the Principally Permitted Use in a particular zone may be appealed to the Coastal Commission.

2.2.2 Agriculture Land Use

Agricultural uses remain a high priority land use type on the coast. The purpose of this land use type is to preserve and protect appropriate coastal agriculture including grazing and livestock uses. The Agriculture Element further describes policy regarding agricultural uses on the coast. The land use plan includes two agricultural use categories, Land Extensive Agriculture, and Diverse Agriculture. The agricultural land use categories vary in the type of agricultural uses and support uses allowed, and by allowable residential density. Agricultural uses are among the highest priority uses within the Coastal Zone.

Land Extensive Agriculture Areas

Purpose and Definition

The Land Extensive Agriculture land use category enhances and protects land best suited for non-intensive agriculture of relatively low production on relatively large parcels (i.e., mainly dairy and other livestock production and grazing). Residential uses within this land use category must be occupied by the owner, farm operator or persons engaged in the farming operation. The objective in Land Extensive Agricultural areas shall be to establish densities and parcel sizes that are conducive to continued agricultural production.

Permitted Uses

The principal permitted use on lands designated Land Extensive Agriculture is agricultural production including those agricultural uses defined in the Coastal Zoning Code for lands designated Land Extensive Agriculture.

Lands designated Land Extensive Agriculture are intended primarily for low intensity agricultural uses on large parcels including grazing, farm animal husbandry, and outdoor row crop production with essential support uses including incidental preparation and storage of crops grown on site and limited farm related residential development.

Additional agricultural and agricultural industry or community serving uses and structures accessory to and compatible with the primary use and consistent with the Local Coastal Program may also be allowed subject to permitting requirements of the Coastal Zoning Code. The Coastal Zoning Code further describes the uses that are permitted within this category and provides additional standards for such development. In addition, all uses located in an environmentally sensitive habitat area, habitat buffer, riparian corridor, critical habitat area, major view, or cultural resource area shall not be considered principally permitted uses.

Permitted Residential Densities. Land divisions shall be permitted only for the purpose of increasing or enhancing agricultural production and must result in a minimum lot size of 640 acres. Allowable residential density is 160 acres per unit.

A maximum of four dwelling units may be allowed per parcel, including all types of units. A farm family dwelling, full-time agricultural employee dwellings, seasonal and year-round farmworker housing, and an accessory dwelling unit are permitted in addition to the dwellings consistent with permitted residential density, provided that no more than four dwellings are permitted per parcel. "Farm family dwelling" means an additional single family dwelling incidental to the main dwelling in terms of size, location and architecture which is not leased, subleased, rented or sub-rented separately from the main dwelling nor divided by sale, and which is inhabited by a member of the farm operator's family. All dwelling units shall be clustered in relation to physical land features and property management conditions. All dwelling units shall be subordinate to and consistent with agricultural production and shall comply with Agricultural Resources Element policies.

Land Extensive Agriculture Designation Criteria. A Land Use Map Amendment to apply the Land Extensive Agriculture land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must

meet the standards in Chapter 3 of the California Coastal Act. A Local Coastal Plan Amendment to apply the Land Extensive Agriculture land use designation must also be consistent with other policies of the Local Coastal Plan and meet one or more of the following criteria:

- (1) Soil and water are adequate for livestock grazing or other crop production.
- (2) Most parcel sizes in the area are greater than 60 acres.
- (3) Existing or historic use for livestock grazing, dairy ranching, hay or similar forage crop.
- (4) Qualifies for Non-Prime Agricultural Land Conservation Act Contract.
- (5) Areas which may not meet the above criteria but which are surrounded by lands in farming.

Diverse Agriculture Areas

Purposes and Definition

The Diverse Agriculture land use category enhances and protects land best suited for diverse types of agriculture on relatively small parcels in which farming may be part-time and may not be the principal occupation of the farmer. The primary purpose of this category is to protect a variety of agricultural uses of scale and intensity to be compatible with coastal resources and to limit the conversion of agricultural parcels to non-agricultural use.

Permitted Uses

Principally permitted uses on lands designated Diverse Agriculture are limited to agricultural production including those agricultural uses defined in the Coastal Zoning Code for lands designated Diverse Agriculture.

Lands designated Diverse Agriculture are intended primarily for a variety of agricultural uses on relatively small agricultural parcels including grazing, farm animal husbandry, and outdoor row crop production with essential support uses including incidental preparation and storage of crops grown on site and limited farm related residential development. In addition, all allowed uses located in an environmentally sensitive habitat area, habitat buffer, riparian corridor, critical habitat area, major view, or cultural resource area shall not be considered principally permitted uses.

Additional agricultural and agricultural industry or community serving uses and structures accessory to and compatible with the primary use and consistent with the Local Coastal Program may also be allowed subject to permitting requirements of the

Coastal Zoning Code. The Coastal Zoning Code further describes the uses that are permitted within this category and provides additional standards for such development.

Permitted Residential Densities. Land divisions shall be permitted only for the purpose of increasing or enhancing agricultural production with a minimum lot size of 160 acres. Allowable dwelling unit density is 40 acres per dwelling unit.

A maximum of four farm related dwelling units may be allowed per parcel. One farm family dwelling per lot, full-time agricultural employee dwellings, seasonal and year-round farmworker housing, and one accessory dwelling unit per lot are permitted in addition to dwellings consistent with permitted residential density, provided that no more than four dwellings are permitted per parcel. All dwelling units shall be clustered in relation to physical land features and property management conditions. All dwelling units shall be subordinate to and consistent with agricultural production and shall comply with Agricultural Resources Element policies.

Diverse Agriculture Designation Criteria. A Land Use Map Amendment to apply the Diverse Agriculture land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the California Coastal Act. A Local Coastal Plan Amendment to apply the Diverse Agriculture land use designation must also be consistent with other policies of the Local Coastal Plan and meet one or more of the following criteria:

- (1) Soil suitable for food crop production and adequate water for irrigation.
- (2) Most parcel sizes in the area are greater than 10 acres.
- (3) Existing or historic use as orchard, vineyard, other food crop production, hay or other forage crop production, livestock grazing, dairy ranching, or other type of farming.
- (4) Qualifies for Prime or Non-Prime Agricultural Land Conservation Act Contract.
- (5) Areas which may not meet the above criteria but which are surrounded by lands in farming.

2.2.3 Recreation and Natural Resources Land Use

The purpose of Recreation and Natural Resources Land Use Policy is to accommodate recreational facilities for County residents and tourists, and to protect lands used for timber production and natural resource conservation. The intent of the policy is to ensure natural resource production and coastal dependent public recreation uses are priority land uses over other land use types and that natural resource areas be conserved and managed to avoid depletion and promote renewable resources.

Recreation Land Use Areas

Purpose and Definition

The Recreation land use category encompasses lands accommodating private or public recreational facilities. This land use category allows for application of a Planned Community (PC) zone and Resources and Rural Development (RRD).

Principally permitted uses on lands designated for Recreation are limited to those defined in the Coastal Zoning Code for the designated zoning district, Planned Community (PC) or Resources and Rural Development (RRD).

Permitted Uses

Planned Community. Zoning for Recreation Lands designated as Planned Community (PC) zoning with an underlying land use of Recreation are intended for use as prescribed in the community's Precise Development Plan, if any, and consistent with the approval for the Planned Community. Common recreation uses in a Planned Community include uses such as golf courses and tennis courts, and other miscellaneous recreational development. Development of new residential uses on lands designated Planned Community (PC) with an underlying land use designation of Recreation requires an amendment of the Planned Community approval and a Local Coastal Program amendment to the land use designation, unless previously prescribed as a permitted use in the Precise Development Plan and Planned Community Approval.

The Coastal Zoning Code further describes the uses that are permitted within this category and provides additional standards for such development.

Resources and Rural Development Zoning for Recreation. Lands zoned Resources and Rural Development with an underlying land use of Recreation are intended primarily for a variety of resource and coastal dependent recreation activities, and limited agricultural uses and related single family dwelling unit. The principally permitted use for lands zoned Resources and Rural Development is land management for the purposes of resource conservation including passive recreation, as described in the Coastal Zoning Code for Resources and Rural Development.

Additional resource, recreation, or community serving uses and structures accessory to and compatible with the primary use and consistent with the Local Coastal Program may also be allowed subject to permitting requirements of the Coastal Zoning Code. The Coastal Zoning Code further describes the uses that are permitted within this category and provides additional standards for such development. In addition, all allowed uses located in an environmentally sensitive habitat area, habitat buffer,

riparian corridor, critical habitat area, major view, or cultural resource area shall not be considered principally permitted uses.

Recreation Permitted Residential Densities. Land divisions for Resources and Rural Development parcels with an underlying land use of Recreation shall be permitted only for the purpose of increasing or enhancing recreation or resource uses with a minimum lot size of 640 acres. Permitted residential density is 160 acres per dwelling unit. A maximum of four resource- or recreation-related dwelling units may be allowed per parcel, including all types of units. All dwelling units shall be clustered in relation to physical land features and property management conditions. All dwelling units shall be subordinate to and compatible with recreation and resource related activities. Land divisions or development of new residential uses for lands zoned Planned Community with an underlying land use designation of Recreation require amendment to the Precise Development Plan or planned community approval and require a Local Coastal Program amendment.

Recreation Designation Criteria. A Land Use Map Amendment to apply the Recreation land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the California Coastal Act. A Local Coastal Plan Amendment to apply the Recreation land use designation must demonstrate adequate road access for the allowed uses and that allowed uses will not adversely affect agriculture or resource production uses and meet one or more of the following criteria:

- (1) Has severe development constraints such as geologic, flood, or fire hazards, marginal or unproven water availability, or limited septic capability, or is vulnerable to environmental impact, but suitable for low intensities of recreational use, passive recreation, or coastal dependent recreation.
- (2) Land is recognized as a legally established recreational use.
- (3) Land is a designated common area without development which is committed to recreation in a planned community.

Resources and Rural Development Land Use Areas

Purpose and Definition

The primary objective of the Resources and Rural Development land use category is to protect lands needed for use and production of natural resources (e.g., water, timber, geothermal steam, or aggregate production); to protect water resources, scenic resources and biotic resources; and to protect from intensive development lands constrained by geologic, flood, or fire hazards or other constraints.

Permitted Uses

Principally permitted uses on lands designated Resources and Rural Development are limited to land management for the purposes of resource conservation including passive recreation as described in the Coastal Zoning Code for Resources and Rural Development. Lands designated as Resources and Rural Development are intended primarily for a variety of land management and coastal dependent recreation activities, but may also be used for limited agricultural uses and very low density residential development not in conflict with the primary resource use of the site.

Additional resource, recreation, agriculture, or community serving uses and structures accessory to and compatible with the primary use and consistent with the Local Coastal Program may also be allowed subject to permitting requirements of the Coastal Zoning Code. The Coastal Zoning Code further describes the uses that are permitted within this category and provides additional standards for such development.

Permitted Residential Density. Land divisions shall be permitted only for the purpose of increasing or enhancing natural resource uses with a minimum lot size of 640 acres. Maximum residential density is 160 acres per dwelling unit.

A maximum of four resource-related dwelling units may be allowed per parcel, including all types of units. A farm family dwelling, full-time agricultural employee dwellings, seasonal and year-round farmworker housing, and an accessory dwelling unit are permitted in addition to the dwellings consistent with permitted residential density, provided that no more than four dwellings are permitted per parcel. All dwelling units shall be clustered in relation to physical land features and property management conditions. All dwelling units shall be subordinate to and consistent with agricultural production and shall comply with Agricultural Resources Element policies.

Resources and Rural Development Designation Criteria. A Land Use Map Amendment to apply the Resources and Rural Development land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the California Coastal Act. A Local Coastal Plan Amendment to apply the Resources and Rural Development land use designation must also be consistent with other policies of the Local Coastal Plan and meet one or more of the following criteria:

- (1) Land has severe constraints such as geologic, flood, or fire hazards; marginal or unproven water availability; or limited septic capability.
- (2) Land contains natural resources such as water, timber, geothermal steam, aggregate, or soil.

- (3) Land contains biotic or scenic resources.
- (4) Land is vulnerable to environmental impact.

Timber Land Use Areas

Purposes and Definition

The primary purpose of the Timber land use category is to protect timberland needed for commercial timber production under the California Timberland Productivity Act. This land use category allows for application of Timberland Production (TP), and Resources and Rural Development (RRD) zones.

Permitted Uses

Principally permitted uses on lands designated Timber Production are limited to those defined in the applied zoning district, either Timberland Production (TP) or Resources and Rural Development (RRD). The principally permitted use on lands designated and zoned for Timber is land management for the continued operation and protection of Timber Preserves. Timber lands may also be used for limited accessory uses and very low density residential development not in conflict with the primary resource use of the site. Additionally, lands zoned Resource and Rural Development (RRD) with an underlying land use designation of Timber may also be used for agricultural operations and very low density residential development not in conflict with the resource use of the site.

Additional resource, recreation, or community serving uses and structures accessory to and compatible with the primary use and consistent with the Local Coastal Program may also be allowed subject to permitting requirements of the Coastal Zoning Code. The Coastal Zoning Code further describes the uses that are permitted within this category and provides additional standards for such development. In addition, all allowed uses located in an environmentally sensitive habitat area, habitat buffer, riparian corridor, critical habitat area, major view, or cultural resource area shall not be considered principally permitted uses.

Permitted Residential. Land divisions shall be permitted only for the purpose of increasing or enhancing timber production, with a minimum lot size of 640 acres. Residential densities shall be limited to one dwelling unit per 160 acres. A maximum of four resource-related dwelling units may be allowed per parcel consistent with permitted residential density.

Timber Designation Criteria. A Land Use Map Amendment to apply the Timber land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the

California Coastal Act. A Local Coastal Plan Amendment to apply the Timber land use designation must also be consistent with other policies of the Local Coastal Plan and meet one or more of the following criteria:

- (1) Land is predominantly in Timber Site Class I, II, III, IV, or V.
- (2) Land has existing or historic use for timber production.
- (3) Timber production is considered the highest and best use of the land.
- (4) Timberland needed for commercial timber production under the California Timberland Productivity Act.
- (5) Land for which harvesting of timber is not prohibited by restrictions placed on property.
- (6) A parcel or contiguous ownership of at least 40 acres in Timber Site Class I or II if it is not contiguous to and under the same ownership as the surrounding land in timber production.
- (7) A parcel or contiguous ownership of at least 80 acres in Timber Site Class III, IV, or V if it is not contiguous to and under the same ownership as the surrounding land in timber production.
- (8) Areas which may not meet the above criteria but which are surrounded by lands in timber production.

Dedicated Open Space Areas

Purpose and Definition

Designated common areas which are committed to perpetual open space in planned developments are in the Dedicated Open Space land use category. This land use category allows for application of the Planned Community (PC) zone for The Sea Ranch planned development and Rural Residential (RR) zone for the Bodega Harbor and other planned developments.

Permitted Uses

The Dedicated Open Space land use category is reserved for application in planned developments and designated rural communities, which are intended to allow diversification in the relationship of various uses, buildings, structures, lot sizes and open spaces. Lands designated as Dedicated Open Space are intended to remain as common area without structures. Uses allowed on Dedicated Open Space areas are limited to those prescribed in the planned development or applicable planned community approval. Approved uses may include grazing, outdoor crop production, and passive recreation.

Development of new uses that are not prescribed in the planning community approval on lands designated Dedicated Open Space requires an amendment of the Precise Development Plan or planned community approval and a Local Coastal Program amendment to the land use designation. The Coastal Zoning Code further describes the process for development of parcels in a Planned Community and provides additional standards for such development.

Designated Open Space Designation Criteria. A Land Use Map Amendment to apply the Dedicated Open Space land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the California Coastal Act. A Local Coastal Plan Amendment to apply the Dedicated Open Space land use designation must also be consistent with other policies of the Local Coastal Plan and meet all of the following criteria:

- (1) Land is a designated common area without development which is committed to open space in a planned community.
- (2) Lands without existing residential, commercial, or industrial development.

2.2.4 Commercial Land Use

The Land Use Plan includes three commercial land use categories – Commercial Fishing, Commercial Tourist, and Commercial Services. The Commercial Fishing land use category encompasses land to accommodate a variety of commercial, light to medium industrial, and service uses which support the commercial fishing and other coastal dependent industries. The Commercial Tourist category is intended to accommodate visitor-serving commercial uses. The primary purpose of the Commercial Services category is to accommodate the day-to-day needs of local residents. While other land use categories may permit limited or incidental commercial use, only these three categories shall be considered commercial land use designations.

The Sonoma County coast is generally not an ideal location for industrial uses due to the distance from population centers, limited work force, minor road system, and exceptional scenic resources and recreation potential, however, limited coastal dependent industrial uses would be acceptable on the coast, within the Commercial Fishing land use category. In Sonoma County coastal-dependent industrial uses would be primarily related to the fishing industry or other industries associated with the marine environment; and otherwise related to timber and agriculture. Most of the Commercial Fishing facilities required on the coast would be accommodated in Bodega Bay.

The Commercial Fishing land use category must be located within an Urban Service Area. Commercial Tourist and Commercial Services land use categories may be applied in Rural Communities and to urban areas within an Urban Service Area.

All commercial uses requiring a coastal development permit are not considered principally permitted uses. Commercial land uses located by an environmentally sensitive habitat area, habitat buffer area, or within a major view shed designated in the Open Space and Resource Conservation Element require a use permit. All clearing of vegetation, grading, excavation, fill or construction are subject to the site development standards contained in the Open Space and Resource Conservation Element.

Commercial Fishing Areas

Purpose and Definition

The Commercial Fishing land use category encompasses land to accommodate a variety of commercial, light to medium industrial, and service uses which support the commercial fishing and other industries which depend on the marine environment and resources. This land use category allows for application of the Commercial Fishing (CF) zone.

Permitted Uses

Principally permitted uses on lands designated Commercial Fishing are limited to fish buying and selling and related fishing industry commercial uses including those defined in the Coastal Zoning Code for Commercial Fishing (CF). Lands designated as Commercial Fishing are intended primarily for a variety of marine dependent commercial uses, but may also be used for limited marine dependent industrial and support uses. Commercial fishing uses include fish buying and selling facilities; warehouses for storage of fishing gear, boats, and trailers; and related accessory structures and uses including fishing supply stores and bait and tackle shops. The Coastal Zoning Code further describes the uses that are permitted within this category and provides additional standards for such development.

Additional resource, recreation, or community serving uses and structures accessory to and compatible with the primary use and consistent with the Local Coastal Program may also be allowed subject to permitting requirements of the Coastal Zoning Code. In addition, all uses requiring a Coastal Development Permit and principal permitted uses allowed in an environmentally sensitive habitat area, habitat buffer, riparian corridor, critical habitat area, major view, or cultural resource area shall be considered other permitted uses.

Building Intensity. The maximum building intensity is determined by multiplying the lot area by the maximum lot coverage and the maximum building height.

Lot Size: New lots shall not be smaller than 1.5 acres on individual wells and septic systems or 1.0 acre on public water and septic. When public sewer is provided, new lots shall not be smaller than 10,000 square feet.

Lot Coverage: The maximum lot coverage is 50 percent.

Height Limits: In areas west of Highway 1, the height limit is 24 feet for commercial and 16 feet for residential with some limited exceptions. In areas east of Highway 1, the maximum height is 24 feet for residential and commercial uses; up to 35 feet for agricultural structures or structures not visible from scenic roads or that are no higher than 24 feet above the corridor and will not block coastal views.

Designation Criteria. A Land Use Map Amendment to apply the Commercial Fishing land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the California Coastal Act. A Local Coastal Plan Amendment to apply the Commercial Fishing land use designation must also be consistent with other policies of the Local Coastal Plan and meet all of the following criteria:

- (1) Lands are not converted from an Agricultural land use category which shall have priority over other commercial or industrial land uses.
- (2) Lands shall be located within an Urban Service Area.
- (3) Lands shall have convenient access to a county or state maintained road, preferably a designated arterial or collector.
- (4) Lands shall be in close proximity and no more than one-half mile to a harbor, marina, bay, or the ocean.
- (5) The intended commercial or industrial uses shall be directly related to: a) support of fishermen and the fishing industry, b) support of boat builders/repairers and the boat building/repair industry; or c) support of other industries which depend on the marine environment and resources.
- (6) Lands shall not be located in a Scenic Landscape Unit or Scenic View Corridor.

Commercial Tourist Areas

Purpose and Definition

The Commercial Tourist land use category encompasses land to accommodate visitor-serving facilities such as lodging, restaurants, retail shops principally serving tourists,

and recreation facilities. This land use category allows application of the Commercial Tourist (CT) zone.

Permitted Uses

Principally permitted uses on lands designated Commercial Tourist are limited to visitor serving commercial uses including those defined in the Coastal Zoning Code for Commercial Tourist (CT). Lands designated as Commercial Tourist are intended primarily for a variety of visitor serving commercial uses. Commercial tourist uses include hotels, motels, inns, resorts, bed and breakfast inns; limited retail shops, bars, restaurants, guest ranches; art galleries, and visitor information centers. The Coastal Zoning Code further describes the uses that are permitted within this category and provides additional standards for such development.

Additional resource, residential, or community serving uses and structures accessory to and compatible with the primary use and consistent with the Local Coastal Program may also be allowed subject to permitting requirements of the Coastal Zoning Code. In addition, all uses requiring a Coastal Development Permit and principal permitted uses allowed in an environmentally sensitive habitat area, habitat buffer, riparian corridor, critical habitat area, major view, or cultural resource area shall not be considered principally permitted uses.

Building Intensity. The maximum building intensity is determined by multiplying the lot area by the maximum lot coverage and the maximum building height.

Lot Size: New lots shall not be smaller than 1.5 acres on individual wells and septic systems or 1.0 acre on public water and septic. When public sewer is provided, new lots shall not be smaller than 10,000 square feet.

Lot Coverage: The maximum lot coverage is 50 percent.

Height Limits: In areas west of Highway 1, the height limit is 24 feet for commercial and 16 feet for residential with some limited exceptions. In areas east of Highway 1, the maximum height is 24 feet for residential and commercial uses; up to 35 feet for agricultural structures or structures not visible from scenic roads or that are no higher than 24 feet above the corridor and will not block coastal views.

Commercial Tourist Designation Criteria. A Land Use Map Amendment to apply the Commercial Tourist land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the California Coastal Act. A Local Coastal Plan Amendment to apply the Commercial Tourist land use designation must also be consistent with other policies of the Local Coastal Plan and meet all of the following criteria:

- (1) Lands shall not be converted from an Agricultural or Commercial Fishing Land Use categories which have priority over visitor-serving commercial uses.
- (2) Lands shall have convenient access to a county or state maintained road, preferably a designated arterial or collector.
- (3) Visitor-serving commercial uses would be compatible with nearby agricultural operations and uses in the surrounding area.
- (4) The site is within or adjacent to a designated Urban Service Area.
- (5) Lands shall not be located in a Scenic Landscape Unit or disrupt a Major View.

Commercial Services

Purpose and Definition

The Commercial Services land use category encompasses land to accommodate the day-to-day retail business, service, recreational, and professional service needs of local residents. This land use category allows application of Commercial Services (CS) and Community Commercial (C2) zones which provide general retail and personal services.

Permitted Uses

Principally permitted uses on lands designated Commercial Services are limited to commercial uses as defined in the Coastal Zoning Code for Commercial Services (CS), and Community Commercial (C2). Lands designated Commercial Services are intended primarily for a variety of local serving commercial uses. Commercial service uses include limited retail business, recreational, and professional service to meet the needs of local residents. The Coastal Zoning Code further describes the uses that are permitted within this category and provides additional standards for such development.

Additional resource, residential, or community serving uses and structures accessory to and compatible with the primary use and consistent with the Local Coastal Program may also be allowed subject to permitting requirements of the Coastal Zoning Code. In addition, all uses requiring a Coastal Development Permit and principal permitted uses allowed in an environmentally sensitive habitat area, habitat buffer, riparian corridor, critical habitat area, major view, or cultural resource area shall not be considered principally permitted uses.

Building Intensity. The maximum building intensity is determined by multiplying the lot area by the maximum lot coverage and the maximum building height.

Lot Size: New lots shall not be smaller than 1.5 acres on individual wells and septic systems or 1.0 acre on public water and septic. When public sewer is provided, new lots shall not be smaller than 10,000 square feet.

Lot Coverage: The maximum lot coverage is 50 percent.

Height Limits: In areas west of Highway 1, the height limit is 24 feet for commercial and 16 feet for residential with some limited exceptions. In areas east of Highway 1, the maximum height is 24 feet for residential and commercial uses; up to 35 feet for agricultural structures or structures not visible from scenic roads or that are no higher than 24 feet above the corridor and will not block coastal views.

Commercial Services Designation Criteria. A Land Use Map Amendment to apply the Commercial Services land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the California Coastal Act. A Local Coastal Plan Amendment to apply the Commercial Services land use designation must also be consistent with other policies of the Local Coastal Plan and meet all of the following criteria:

- (1) Lands are not converted from an Agricultural, Commercial Fishing, or Commercial Tourist land use category, which shall have priority over other commercial land uses.
- (2) The designation does not reduce opportunities for affordable or workforce housing.
- (3) Lands shall have convenient access to a county or state maintained road, preferably a designated arterial or collector.
- (4) The amount of land designated for local-serving commercial uses shall be consistent with the population projected for the local market area.
- (5) In rural areas, lands may be limited to a single parcel and be restricted to that level which can be served by an individual well and septic system.
- (6) Lands shall not be located within a Scenic Landscape Unit or Major View shed.

2.2.5 Public/Institutional Land Use

Public Facilities Areas

Purpose and Definition

The Public Facilities land use category consists of land accommodating institutional or public uses which serve the community or public need and are owned or operated by government agencies, non-profit entities, or public utilities. However, public uses are also allowed in other land use categories. The Public Facilities and Services Element establishes policies for the location of public uses in these other land use categories. This land use category allows for application of one zone (Public Facilities – PF).

Permitted Uses

Principally permitted uses on lands designated Public Facilities are limited to utility and public service facilities including those defined in the Coastal Zoning Code for Public Facilities (PF). Lands designated Public Facilities are owned and operated by a city, county, special district, federal agency, or state for the primary purpose of providing an essential public service, including public safety, administrative services and the production, generation, transmission, collection, and storage of water, waste, or energy. The Coastal Zoning Code further describes the uses that are permitted within this category and provides additional standards for such development.

Additional resource, recreational, or community serving uses and structures accessory to and compatible with the primary use and consistent with the Local Coastal Program may also be allowed subject to permitting requirements of the Coastal Zoning Code. In addition, all allowed uses located in an environmentally sensitive habitat area, habitat buffer, riparian corridor, critical habitat area, major view, or cultural resource area shall not be considered principally permitted uses.

Reuse of Public Properties. The County should evaluate, as appropriate, any federal, state, and school properties on the coast that may become surplus properties; and identify those properties that the County may be interested in acquiring. If the County receives the notice of sale of surplus federal, state, or state school property, the Sonoma County Administrator's Office and appropriate County Departments should be notified in a timely manner.

In addition, the County should work with the U.S. General Services Administration for federal properties, California Department of General Services (DGS) for state properties, and DGS and School Districts for state school properties for early notice of properties declared as surplus and offered for sale; and for early consultation regarding potential land use implications of future uses.

Building Intensity. The maximum building intensity is determined by multiplying the lot area by the maximum lot coverage and the maximum building height.

Lot Size: New lots shall not be smaller than 6,000 square feet.

Lot Coverage: The maximum lot coverage is 50 percent.

Height Limits: In areas west of Highway 1, the height limit is 24 feet for commercial and 16 feet for residential with some limited exceptions. In areas east of Highway 1, the maximum height is 24 feet for residential and commercial uses; up to 35 feet for agricultural structures or structures not visible from scenic roads or that are no higher than 24 feet above the corridor and will not block coastal views.

Public Facilities Designation Criteria. A Land Use Map Amendment to apply the Public Facility land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the California Coastal Act. A Local Coastal Plan Amendment to apply the Public Facility land use designation must also be consistent with other policies of the Local Coastal Plan and meet all of the following criteria:

- (1) Ownership or long-term lease by a government agency, other non-profit entity, or public utility.
- (2) Adequate road access.
- (3) Lands are not suitable for and will not adversely affect agriculture or resource production activities.

2.2.6 Residential Land Use

The Land Use Plan has two residential land use categories - Rural Residential and Urban Residential. The Urban Residential land use category may only be used within an Urban Service Area where public services for sewer and water are available. Maximum residential densities are shown on the Land Use Map. While other land use designations may permit limited or incidental residential use, only these two categories will be considered residential land use designations. The designation criteria shall be applied when considering future Local Coastal Plan Amendments. Additional standards applicable to development on residential lands may be included in the Coastal Zoning Ordinance and local area design guidelines.

Rural Residential Areas

Purpose and Definition

The Rural Residential land use category provides for very low density residential development on lands which have few if any public services but which have access to county maintained roads. These lands are generally suitable for only relatively low density residential land uses that are consistent with maintaining open space in order to preserve and manage natural resources, provide outdoor recreation, and protect public health and safety. This land use category allows application of the Rural Residential (RR) zone which allows limited crop and farm animal husbandry; an Agricultural and Residential (AR) zone which allows unlimited crop and farm animal husbandry on parcels of 2 acres or more; and a Planned Community (PC) zone in which the allowable land uses are based on an approved precise development plan.

Permitted Use

Principally permitted uses on lands designated Rural Residential are limited to single family residential uses including those defined in the Coastal Zoning Code for the applicable zoning district, Rural Residential (RR), Agricultural Residential (AR). Allowable uses on lands zoned Planned Community (PC) are limited to those described in the approved precise development plan for the planned community. Lands designated Rural Residential not within a planned development are intended for low densities of residential development and associated accessory structures and uses including accessory dwelling units and limited agricultural uses. The Coastal Zoning Code further describes the uses that are permitted within this category and provides additional standards for such development.

Additional resource, recreational, or neighborhood serving uses and structures accessory to and compatible with the primary use and consistent with the Local Coastal Program may also be allowed subject to permitting requirements of the Coastal Zoning Code. In addition, all allowed uses located in an environmentally sensitive habitat area, habitat buffer, riparian corridor, critical habitat area, major view, or cultural resource area shall not be considered principally permitted uses.

Permitted Residential Density. Allowable residential density for Rural Residential areas ranges from 1 to 20 acres per dwelling unit. Maximum residential density is applied based on similar density of existing lots in the surrounding area, suitable soils for septic disposal, available water, environmental suitability, access to arterial or collector roads, proximity of commercial services and public services and facilities, and no significant impacts on agriculture and resource production. Lots smaller than 1.5 acres shall not be created if the residence is to be served by an individual well and septic system. New lots may be as small as 1 acre if the residence is to be served by a public water system.

Designation Criteria. A Land Use Map Amendment to apply the Rural Residential land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the California Coastal Act. A Local Coastal Plan Amendment to apply the Rural Residential land use designation must also be consistent with other policies of the Local Coastal Plan and meet all of the following criteria:

- (1) Lands are not converted from an Agricultural, Commercial Fishing or Commercial Tourist land use category, which shall have priority over residential land uses.
- (2) The area does not have soils suitable for agricultural production.

- (3) The area does not include substantial agricultural or resource uses.
- (4) Lands have access to a County maintained road.
- (5) Lands have enough groundwater for individual wells.
- (6) Lands have sufficient permeability for individual septic systems.

Urban Residential Areas

Purpose and Definition

The Urban Residential land use category includes land with public services for low and medium density residential development. It accommodates a variety of housing types depending on the density assigned on the Land Use Map. This land use category allows application of three residential zones including: Low Density Residential (R1) which allows only one single-family dwelling per lot; Medium Density Residential (R2) which allows multi-family dwelling units; and, Planned Community (PC) in which the allowable density is based on an approved precise development plan.

Permitted Use

Uses allowed on lands designated Urban Residential are limited to those defined in the Coastal Zoning Code for the applicable zoning district. Principally permitted uses on lands zoned Low Density Residential (R1) are limited to single family residential uses. Principally permitted uses on lands zoned Medium Density Residential (R2) are limited to medium density single family and multifamily housing as described in the Coastal Zoning Code for the designation. Principally permitted uses on lands zoned Planned Community (PC) are limited to those described in the precise development plan or approval for the planned community. Low Density Residential (R1) allows for the development of single family residences and associated accessory structures and uses on small lots developed in accordance to density. Medium Density Residential (R2) allows for the development of multifamily residential development in accordance with permitted density, including those developed as transitional and density bonus projects. The Coastal Zoning Code further describes the uses and densities that are permitted within this category and provides additional standards for such development.

Additional resource, recreational, or neighborhood serving uses and structures accessory to and compatible with the primary use and consistent with the Local Coastal Program may also be allowed subject to permitting requirements of the Coastal Zoning Code. In addition, allowed uses located in an environmentally sensitive habitat area, habitat buffer, riparian corridor, critical habitat area, major view, or cultural resource area shall not be considered principally permitted uses.

Permitted Residential Density. Allowable residential density for Urban Residential areas ranges from 1 to 6 units per acre in low density residential zones and 6 to 12 units per acre in medium density residential zones. Residential densities are based on availability of public services and infrastructure, land use compatibility, environmental suitability, projected population and development, and neighborhood character. New lots shall not be smaller than 6,000 square feet. Environmental suitability includes but is not limited to protection of habitat area, riparian corridors, major views, minimizing the risk of hazards and vulnerability to sea level rise, or coastal bluff erosion.

Residential density may be increased if the project qualifies under the state density bonus program outlined in California Government Code Section 65915; or the County supplemental density bonus program or housing opportunity area program; and in the Coastal Zoning Ordinance under affordable housing program requirements and incentives. Low Density Residential parcels with a mapped density of 4 units per acre may be increased to a maximum of 11 units per acre as a Housing Opportunity Ownership project. Mapped densities of 7 to 8 units per acre may be increased to a maximum of 16 units per acre as a Housing Opportunity Rental project. Approval of any increase in residential density is subject to specific findings regarding the adequacy of public services, consistency with the Local Coastal Program, and mitigation of impacts to coastal resources. Application of higher residential density under the density bonus or housing opportunity programs may require a Local Coastal Plan Amendment.

Designation Criteria. A Land Use Map Amendment to apply the Urban Residential land use designation requires a Local Coastal Plan Amendment subject to certification by the California Coastal Commission and must meet the standards in Chapter 3 of the California Coastal Act. A Local Coastal Plan Amendment to apply the Urban Residential land use designation must also be consistent with other policies of the Local Coastal Plan and meet all of the following criteria:

- (1) Lands are not converted from an Agricultural, Commercial Fishing or Commercial Tourist land use category, which shall have priority over residential land uses.
- (2) Lands are within a designated Urban Service Area.
- (3) Adequate water, sewer, public safety, park, school services, and other necessary infrastructure are available or planned to be available.
- (4) Lands have convenient access to designated arterial or collector roads.
- (5) Lands are not subject to unacceptable levels of risk such as flooding, geologic hazards, excessive noise, or other hazards.
- (6) Lands have convenient access to commercial uses and community services.

3. LAND USE POLICY

3.1 Outer Continental Shelf Development Policy

The Sonoma County Local Coastal Plan discourages general industrial and commercial energy development on the Sonoma County coast. Long-range protection of coastal agriculture, forestry, and commercial and recreational fishing; and enhancement of tourism and recreation are the priorities of the Coastal Program. These priorities are considered to be incompatible with energy development, in particular off shore drilling.

In 1981, the U.S. Department of the Interior proposed Outer Continental Shelf (OCS) oil lease sales off the central and northern California Coast, including the Bodega Basin. Due to its existing harbor facilities, the Bodega Bay area was considered a possible onshore support base for the future offshore oil production platform. The availability of land, housing, harbor facilities, and public and commercial services influence the location for a potential future onshore support base.

The size of an onshore support base varies with the estimate of the amount of oil found during exploration. The lease sale proposed in 1981 would have required a temporary support base of five to ten acres for platform construction during the exploration phase. During the development phase a permanent facility would have been constructed at the same location, and additional land may have been necessary based on the amount of oil found during exploration. Ultimately a support base of 10 to 20 acres with wharf and loading facilities, a heliport, and a channel depth of 15-20 feet may have been necessary. Ultimately the Bodega Basin was removed from the list of areas proposed for lease sale.

3.1.1 On-Shore and Off-Shore Oil and Gas Facilities

Concerns in the 1980s about development of the Outer Continental Shelf led to the 1986 approval of Ordinance 3592R, known as the On-Shore Oil and Gas Facilities ordinance of Sonoma County. The ordinance is the result of a countywide ballot initiative that requires voter approval of any proposed Local Coastal Plan Amendment to allow onshore facilities that would support oil and gas development of the outer continental shelf. Section 31-3(a) of the ordinances states:

When any person proposes to undertake the development within Sonoma County of any on-shore energy facility relating to the exploration or development of off-shore oil or gas resources and requests an amendment of the County's Certified Local Coastal Program to facilitate such development, a determination by the Board of Supervisors pursuant to Public Resources Code section 30515 that the proposed amendment is in conformity with the policies of the Coastal Act and that the Certified Local Coastal Program should be amended to incorporate such

development shall not be effective unless a majority of the electors of Sonoma County in a general or special election, approve the proposed amendment. The decision on whether to call a special election or a general election shall be in the discretion of the Board of Supervisors.

Following adoption of Ordinance 3592R, the County initiated a more detailed study of the potential impacts of onshore support facilities on the Sonoma County coast. This study, entitled *"Offshore Oil Development: Onshore Support Facilities Feasibility Study"* was completed.

One of the primary findings of the study is that no suitable sites exist on the Sonoma County coast for industrial onshore oil support facilities. The study indicates that onshore support facilities for offshore oil production are inappropriate due to a number of constraints, which include:

- (1) Bodega Bay, the only existing harbor on the Sonoma County coast, has insufficient space and infrastructure to accommodate a crew or supply base;
- (2) Public services such as water and sewer are inadequate;
- (3) Over 50 percent of the Sonoma County coast is in State and County parks, where development could preempt coastal access and conflict with recreational activities;
- (4) County and State policies protect sensitive biological habitats and scenic corridors, which could be adversely affected by development;
- (5) There is a lack of affordable or market housing to accommodate a substantial new employment force;
- (6) Local Coastal Plan policies support ecosystem and habitat protection and coastal dependent visitor serving and recreation uses over other uses on the Sonoma County coast; Sonoma County's coastal dependent industries include commercial fishing and recreation and tourism; and
- (7) No land use designation in the Local Coastal Plan allows development of onshore oil and gas support facilities.

The report noted that Bodega Bay could be considered as a site for a very limited and restricted crew or supply base on land designated Commercial Fishing. However, sea level rise may further reduce the feasibility of major facilities along the shoreline. A complete environmental analysis, including the potential effects of sea-level rise, and Local Coastal Plan Amendment, including voter approval pursuant to Ordinance 3592R, would be required.

In 2015, the Greater Farallones National Marine Sanctuary was expanded to approximately 3,295 square miles and envelopes the Cordell Bank National Marine

Sanctuary of 1,286 square miles, encompassing the entire Sonoma County coastline extending from just south of the Bolinas Lagoon in Marin County to a few miles north of Point Arena Lighthouse in Mendocino County. This area encompasses one of the most productive upwelling zones along the Pacific Coast providing nutrients that fuel an incredibly productive ocean area protected by the Marine Sanctuaries. Offshore oil drilling is prohibited within the Sanctuary's boundaries. Thus, any potential future offshore oil drilling would be limited to areas beyond the Greater Farallones National and Cordell Bank National Marine Sanctuary boundaries.

GOAL C-LU-1: Protect the Sonoma County coast from Outer Continental Shelf oil and gas exploration and development.

Objective C-LU-1.1: Discourage offshore oil and gas exploration and development off the Sonoma County coast.

Objective C-LU-1.2: Prohibit construction of onshore support facilities for offshore oil and gas development to protect the sensitive coastal habitats along the National Marine Sanctuaries.

The following policies shall be used to achieve these objectives:

Policy C-LU-1a: A Local Coastal Plan Amendment shall be required for any proposed onshore facility to support offshore oil and gas exploration or development. Any such amendment shall not be effective until a majority of the voters in Sonoma County, in a general or special election, approve the proposed amendment, unless such amendment is approved by the California Coastal Commission pursuant to Section 30515 of the California Coastal Act. **(Existing LCP Revised)**

Policy C-LU-1b: Prohibit onshore oil and gas support facilities within the Commercial Fishing land use category. **(Existing LCP Revised)**

3.2 Community Policies

Adequate housing and commercial development is needed to serve the resident population and visitors but must be consistent with continued resource uses for agricultural production, commercial fishing, and timber, as well as, the protection of sensitive coastal resources and available services.

Most new residential development is planned in Bodega Bay, where a full range of public services can be efficiently provided. The present alignment of State Highway 1 through this area is a major development constraint due to traffic congestion. The previous Local Coastal Plan limited residential development in Bodega Bay based on

construction of a State Highway 1 Bypass, but that project is no longer planned for construction and is not included in the General Plan or the Local Coastal Plan.

Increased tourism on the Sonoma County coast may result in an imbalance between local and tourist oriented commercial development. Visitor-serving uses, particularly lodging, are often located near scenic resources. Too many facilities in sensitive scenic areas may harm the unique qualities of the coast which are protected under the California Coastal Act and by the Local Coastal Plan.

GOAL C-LU-2: **Protect the natural and scenic resources and the unique character and qualities of the Sonoma County coast by allowing new residential and commercial development only in appropriate areas at appropriate densities.**

Objective C-LU-2.1: Provide most of the new housing in Bodega Bay. Provide residential development in rural areas at very low densities to maintain local resources.

Objective C-LU-2.2: Balance residential and commercial development in Bodega Bay where adequate public services allow for residential and commercial expansion. Encourage a mix of price and rent levels.

Objective C-LU-2.3: Designate Bodega Bay as the major retail and service center for the coast. Permit limited opportunities for new commercial activities in the communities of The Sea Ranch, Duncans Mills, Jenner, and Stewarts Point, in keeping with their size and character.

Objective C-LU-2.4: Limit the scale of any new visitor and tourist oriented uses and confine them to existing communities and locations that are designated for such uses. Assure that they are compatible with and protect the area's natural, undeveloped scenic character.

Objective C-LU-2.5: Limit new industrial development to resource related uses, primarily to the fishing and other marine industries in Bodega Bay and to the timber industry near Stewart's Point.

Objective C-LU-2.6: Maintain very low residential densities on resource lands outside existing communities due to the lack of public services and importance of resource protection.

The following policies shall be used to achieve these objectives:

Policy C-LU-2a: The Urban Residential land use category shall be applied only within the Urban Service Boundary of Bodega Bay. Densities of one unit per acre or lower shall be maintained in other communities. **(GP2020)**

Policy C-LU-2b: Encourage construction of new housing for low and moderate income households under the Density Bonus or Housing Opportunity Area Programs outlined in the Coastal Zoning Ordinance. Achieving a density higher than 4 units per acre under either Program may not require a Local Coastal Plan Amendment. **(GP2020)**

Policy C-LU-2c: The Commercial Services land use category shall be used for existing and any needed new local commercial uses in Bodega Bay and The Sea Ranch. Outside these communities, the Commercial Services designation shall be applied only to existing uses and limit their expansion. **(GP2020)**

Policy C-LU-2d: Development projects in any commercial land use categories shall be designed in harmony with the natural and scenic qualities of the local area. Natural landscapes shall be given precedence over manmade features. **(GP2020)**

Policy C-LU-2e: In the Bodega Bay area, the Commercial Fishing land use category shall be used to support the commercial fishing industry, including storage and processing facilities. **(New)**

Policy C-LU-2f: Fishing related industrial uses that require public services shall be located near Bodega Bay. Other fishing related commercial and industrial uses shall be considered coastal dependent uses. **(GP2020)**

Policy C-LU-2g: Notwithstanding the provisions of the Public Facilities and Services Element, connection of sewer service to the Bodega Bay Public Utilities District shall be allowed for uses that directly relate to and support the fishing industry in Bodega Bay and that cannot be located within the Urban Service Area. An out-of-service area agreement shall be used in such cases. **(GP2020)**

Policy C-LU-2h: Barns and similar agricultural support structures within the 200-foot State Scenic Highway 116 corridor shall be subject to design review. **(GP2020)**

Policy C-LU-2i: Continue to identify Urban Service Area Boundaries on the Land Use Maps for The Sea Ranch North (**Figure C-LU-1a**), The Sea Ranch South (**Figure C-LU-1b**), and Bodega Bay (**Figure C-LU-1j**). **(Existing LCP Revised)**

Policy C-LU-2j: Continue to designate as Rural Communities the lands within existing residential subdivisions Jenner, Rancho del Paradiso, West Beach, Sereno del Mar, Gleason Beach, Carmet, and Salmon Creek. **(Existing LCP Revised)**

Policy C-LU-2k: Continue to designate as Rural Communities the Timber Cove, Timber Cove Inn, and existing developed areas adjacent to the subdivision south to and including the Fort Ross Store. **(Existing LCP Revised)**

Policy C-LU-2l: Continue to designate as Rural Communities existing developed areas at Duncans Mills, Valley Ford and Stewarts Point. **(Existing LCP Revised)**

Policy C-LU-2m: Water and sewer service extensions to public parklands outside of Urban Service Areas may be allowed only where consistent with the Public Facilities and Services and Public Access Elements. **(Existing LCP Revised)**

Policy C-LU-2n: Provide for commercial development only within designated Urban Service Areas and Rural Community boundaries, except where development proposed for areas beyond these boundaries would be consistent with the Public Facilities and Services and Public Access Elements. **(Existing LCP Revised)**

3.2.1 The Sea Ranch

Background

The northern 10 miles of the Sonoma County coast is occupied by The Sea Ranch, a planned community of 5,200 acres conceived and designed by Oceanic California, Inc. (OCI) in the mid-1960s in the early days of the environmental movement. The Sea Ranch, now famous for its distinctive architecture and sensitive integration of the built and natural environments, is the most populous community on the coast and has become a major tourist destination.

Although planned primarily for second homes, The Sea Ranch now contains a community of full-time and part-time residents. All residential lots at The Sea Ranch are in a homeowners' association governed by one of the nation's first set of Codes, Covenants, and Restrictions (CC&Rs) that set forth the conditions of ownership. All aspects of development in the community must be reviewed and approved by a semi-autonomous Design Committee composed of architects and landscape architects. The work of the Design Committee is guided by The Sea Ranch Design Manual and Rules updated and adopted by the Board of Directors in 2007 and recorded with Sonoma County.

Sonoma County approved the concept plans for The Sea Ranch planned community in two phases, 1964 and 1968, and subsequently adopted a Precise Development Plan for all 5,200 acres. The Precise Development Plan called for 5,200 residential lots, golf course, lodge, recreational facilities, commercial area, airport, equestrian facilities, timber preserves, and more than half of the property as common area (Commons).

California Coastal Act and Bane Bill

Development at The Sea Ranch was underway when in 1972 passage of the California Coastal Initiative stopped the progress of development at The Sea Ranch. In 1976 the State Legislature enacted the California Coastal Act, establishing the California Coastal

Commission and approving the State Coastal Plan. In 1979 the Coastal Commission adopted Overall Conditions that were to be met before allowing further development of lots at The Sea Ranch. Most of the conditions were incorporated into the Bane Bill, enacted by the State Legislature in 1980 to resolve issues regarding residential density, house design, views to the ocean, public access, State Highway 1, and water storage and septic systems. Under the Bane Bill, OCI reduced the number of residential lots by 55 percent from 5,200 to 2,029; but the final decision on the maximum number of lots was left to be determined by Sonoma County and included in its Local Coastal Plan.

In addition to a reduction in the number of houses that could be built at The Sea Ranch, The Bane Bill established other land use requirements and standards which have resulted in the following:

- (1) *Public Access:* Oceanic California, Inc. and The Sea Ranch Association granted to Sonoma County easements for parking areas and public access trails from State Highway 1 to each of five beaches, and for public access to the northern third of the Coastal Bluff Trail, in addition to the 75 acres OCI had already deeded to the County for the regional park and campground along the Gualala River (Gualala Point Regional Park; see Public Access Plan in **Appendix B**).
- (2) *View Corridor Easements:* OCI and The Sea Ranch Association granted easements allowing Sonoma County to remove trees to preserve views in 15 view corridors from State Highway 1 to the ocean.
- (3) *Design Criteria:* Sonoma County imposed limits, established by the California Coastal Commission, on the height, size, and bulk of houses on lots within view corridors.
- (4) *State Highway 1 Easements:* Sonoma County acquired easements along State Highway 1 for highway improvements including left-turn lanes, turnouts, and a bicycle lane north of Walk-on Beach.
- (5) *Water Storage:* The Sea Ranch increased its water storage capacity to protect Gualala River flows for coho salmon and steelhead trout.
- (6) *Septic Systems:* The Sea Ranch established a program for monitoring septic systems.

In exchange for accepting these changes to its approved development plan, The Sea Ranch received \$500,000; the right for owners to build on residential lots without obtaining a Coastal Development Permit; and a guarantee from the County that no further public access would be required.

Sonoma County Plan

In 1982 Sonoma County revised its 1981 Local Coastal Program to incorporate the provisions of the Bane Bill, and adopted *The Sea Ranch Geographic Area of the Land Use and Implementation Plan*. The Plan included four major changes to land use at The Sea Ranch:

- (1) *Additional Lots*: An additional 300 residential lots permitted.
- (2) *Affordable Housing*: Designation of 15 percent or 45 of the 300 lots for employee housing in Unit 35D.
- (3) *Transfer Site*: Designation of Unit 39 as the transfer site, to be subdivided into 100 lots and deeded to the Coastal Conservancy. The policy was to transfer density from old subdivisions elsewhere on the Sonoma Coast to this site. The total number of residential lots permitted would increase to 2,429.
- (4) *Lodge Expansion*: Addition of 100 rooms to The Sea Ranch Lodge contingent on construction of the employee housing.

In 1982 the above land use modifications plus the Bane Bill provisions were incorporated into *The Sea Ranch Precise Development Plan*.

Property Sale and Developer Exit

After a period of eight years, building again proceeded at The Sea Ranch. Oceanic California, Inc. was sold, and in 1988 the new owner attempted to recoup some losses by selling off some of its Sea Ranch holdings including the Sea Ranch Lodge; the golf course; and the South, Central, and North Timber Production Zones. The Sea Ranch Association became the owner of the corporation yard, its office on Annapolis Road, and a 147-acre parcel along State Highway 1, named the remnant lands, which contain a site reserved for a school by Horicon School District. Only the residential lots are included in The Sea Ranch Association, but the Design Committee continues to have design review authority over development of the original Sea Ranch parcels with the exception of the Timber Production Zones. By the mid-1990s, OCI and its successor were no longer associated with The Sea Ranch.

Development

Residential

In 2018, The Sea Ranch included 1818 housing units, about 1,500 full-time residents, and 480 residential lots remaining to be developed.

The 30-acre transfer site was subdivided and deeded to the Coastal Conservancy (Conservancy). No density transfer took place; instead the Conservancy sold the

property. The new owner subdivided 7 acres into 7 lots that have been sold and developed. The remaining 23 acres is now a single parcel – the only parcel of significant size remaining for residential development at The Sea Ranch. Development on this parcel is constrained by environmental issues evaluated in an Environmental Impact Report prepared at the time the Conservancy sold the property resulting in conservation easements encumbering a significant portion of the property.

The site at the intersection of State Highway 1 and Annapolis Road was designated as a future church site. By 2000 it was apparent that no church was interested in developing the site, therefore The Sea Ranch Association re-designated it and sold it as a single-family residential lot. It will become part of the Association when the owner decides to build.

Affordable Housing. Adoption of the California Fair Housing Act in 1985 made it illegal to allocate subsidized housing units according to the source of income. Therefore, the employee housing became affordable housing open to anyone meeting the income criteria. Oceanic California, Inc. built the first 15 affordable housing units in the late 1980s, and then deeded these units and the remaining lots to a local consortium that purchased The Sea Ranch Lodge and golf course. The consortium built the remaining 30 affordable units and rebuilt one of the original 15 units that had burned down. The entire affordable housing project was acquired by the non-profit affordable housing developer, Burbank Housing Development Corporation (Burbank Housing), which has since owned and managed the affordable housing complex either directly or through a subsidiary.

Burbank Housing later found that increases in The Sea Ranch Association homeowners' association dues made it difficult to finance needed maintenance and repairs to the affordable housing units. Under its governing documents, The Sea Ranch Association must treat all owners equally and, therefore, could not reduce dues on the 45 affordable housing lots. In 2008 The Sea Ranch Association, Burbank Housing, and Sonoma County began a multi-year process to seek a solution. They reached an agreement in 2015 under which The Sea Ranch Association reduced the homeowners' association dues for the affordable housing units so that Burbank Housing can continue to provide the affordable units.

Recreational

The Bane Bill required The Sea Ranch Association and Oceanic California, Inc. to dedicate public access easements for five new vertical accessways with lateral connections to beaches, and a bluff top trail in the northern three units of The Sea

Ranch. These accessways have been dedicated and accepted, and are maintained by Sonoma County Regional Parks.

The Sea Ranch contains a public 18-hole golf course. The public has access to the five largest beaches and more than 3 miles of trail along the coastal bluffs. The Sea Ranch Lodge has 19 rooms, and The Sea Ranch contains about 400 houses for rent. A chapel located off State Highway 1 is open to the public.

Private recreational development at The Sea Ranch includes over 50 miles of hiking, equestrian, and bike trails; and three recreation centers with swimming pools, tennis courts, meeting rooms, and space for other activities. The Del Mar Center, One-eyed Jack, Knipp-Stengel Barn, and Hot Spot facilities provide space for community gatherings. A private airstrip and hangars are located near Annapolis and Timber Ridge Roads.

Commercial

The Sea Ranch Lodge and Golf Course are now under separate ownership, but bound by a 1991 agreement establishing the development potential and limits on each property. Under this agreement, up to 40 of the lodge rooms could be built at the golf course. Expansion of The Sea Ranch Lodge was approved by both The Sea Ranch Design Committee and Sonoma County. No expansion has taken place, and the Design Committee approval has expired.

Most commercial services for residents and visitors to The Sea Ranch are located in Gualala in Mendocino County, about one mile north of The Sea Ranch. Commercial services on or near The Sea Ranch include a building supply store, bakery and coffee shop, and offices on Verdant View Way just off Annapolis Road; a post office, restaurant, and gift shop at The Sea Ranch Lodge; and a grocery store, deli, and restaurant at the historic Stewart's Point Store, about four miles south of The Sea Ranch.

Infrastructure

Water. The Sea Ranch Water Company (a wholly owned publicly regulated subsidiary of The Sea Ranch Association) completed a \$7 million upgrade of its water storage and transmission infrastructure in 2014. The project included the following components: an upgrade to the water treatment plant to improve filtration and pumping; replacement of over two miles of high capacity water transmission lines; a new pumping station to improve fire flows to 11 square miles at the south end of The Sea Ranch; and a new concrete storage tank of 900,000 gallons to serve as the master water supply between the water system wells and reservoir and The Sea Ranch neighborhoods.

Wastewater. Two sewage treatment plants operated by The Sea Ranch Water Company under contract with the Sonoma County Water Agency serve units at The Sea Ranch North and The Sea Ranch Central. About 1,700 units could be connected to the sewer system under build-out of these areas.

The remainder of The Sea Ranch is served by septic systems. About 1,600 lots could be developed on individual septic systems. An on-site wastewater management district oversees the monitoring and compliance of the septic systems and reports annually to the North Coast Regional Water Quality Control Board and Permit Sonoma.

Telecommunications. In 2014, The Sea Ranch Association began work on a \$5.5 million community-wide telecommunications network (Fiber to the Home Telecommunications Network) to provide fast, reliable, high capacity, and affordable internet and telephone service to The Sea Ranch. The Association estimates the project will be constructed and operational in 2016.

Programs and Plans

Scenic View Easements. The Bane Bill required the California Coastal Commission to establish scenic view easements along State Highway 1. Within these easements removal of trees to restore and preserve scenic views from the highway would be allowed. In 1980 the California Coastal Commission designated the locations and established the design criteria for the "Scenic Views." In 1982 the Scenic Views and associated design criteria were incorporated into the Local Coastal Plan. In 1983 the County acquired the easements for the Scenic Views, maintained by Sonoma County Regional Parks.

Height, Site, and Bulk Criteria. The Bane Bill also required the California Coastal Commission to specify design criteria for any development visible from areas with Scenic Views. Adopted by the Coastal Commission in 1982, the Height, Site, and Bulk Criteria specify certain lots that are subject to height restrictions, volume or bulk limits, and/or siting limitations due to topography and/or the location of trees. The criteria are enforced by the County through the permit process and the Sea Ranch Design Review Committee.

Comprehensive Environmental Plan. In 1988 The Sea Ranch Association hired an environmental planner to help members prepare an environmental plan for The Sea Ranch. The Sea Ranch Comprehensive Environmental Plan was adopted in 1996 and updated in 2004 and 2013. The Environmental Plan provides detailed information and guidelines on land use, building design, landscape, community facilities, infrastructure, public safety, and regional relationships. It is used by The Sea Ranch staff, committees, and Board of Directors to guide decisions.

Fuel Management Plan. In 2002 The Sea Ranch Association hired a fire management consultant to assist with development of a Fuel Management Plan to reduce fuel load and increase fire safety. The focus of the Plan is treatment of areas adjacent to State Highway 1 and in the neighborhoods to ensure roads are safe for evacuation, egress, and movement of fire control vehicles and equipment. A major component of the Plan is a sheep grazing program in which a herd of 350 – 400 sheep are moved every few days among the west side meadows, along the highway, and on the uphill eastern side of The Sea Ranch where the fire hazard is greatest.

Biotic Resource Inventories. In 2013, The Sea Ranch Association Planning Committee formed a Biotic Resources Subcommittee, the mission of which is to document and preserve the rare, endangered, and unique plant and animal species at The Sea Ranch. Plant surveys were conducted in 2014 and 2015, and animal surveys are planned for 2016.

GOAL C-LU-3: Design and approve new development at The Sea Ranch according to the Bane Bill.

Objective C-LU-3.1: Apply the Bane Bill design criteria to development on the designated “Bane Bill” lots at The Sea Ranch.

The following policies shall be used to achieve these objectives:

Policy C-LU-3a: The Height, Site, and Bulk Guidelines for The Sea Ranch adopted pursuant to Public Resources Code Section 30610.6 (e) shall be applied to all new development subject to design review. **(Existing LCP Revised)**

Policy C-LU-3b: Building and other permits or subdivision approvals for properties subject to design review by The Sea Ranch Design Committee shall not be issued unless the applicant has first received final approval from The Sea Ranch Design Committee. **(New)**

3.2.2 Bodega Bay

Background

Bodega Bay, the largest general commercial center on the South Sonoma Coast, had a permanent population of about 1,077 in 2010. There were a total of 533 occupied housing units out of a total of 1,060 available in 2010, which generated a vacancy rate of 49.7 percent. The majority of the vacant housing units (40.2 percent) were designated for seasonal, recreational, or occasional use, while the remaining 9.5 percent were for sale, for rent, or for other uses. The Harbor View Subdivision, completed in 2005, added 70 single-family parcels and one multi-family parcel for 14 affordable apartments. The

14 apartments were constructed in 2008. The subdivision site improvements were completed, though none of the single-family units have been constructed as of 2017.

The issues associated with development in Bodega Bay include lands with sensitive biotic resources and geologic hazards, water supply, and traffic. Traffic congestion is already severe on summer weekends through Bodega Bay. Traffic volumes on State Highway 1 will continue to increase through Bodega Bay due to increases in general recreational traffic on the coast.

Under the previous Local Coastal Plan, a phased Land Use Plan comprised of Phases I and II was proposed to coordinate the population and development of Bodega Bay with development of a road off State Highway 1 that would bypass the center of town – the Bodega Bay Bypass. The Bodega Bay Bypass would provide significant relief to congestion problems in Bodega Bay and allow for expanded development in the community. Phase II was dependent on construction of the Bodega Bay Bypass. Phasing was accomplished by placing a holding zone of Rural Residential with a frozen lot size (RR B8) on all Phase II development lands, and in no case were Phase II lands to be rezoned to their maximum potential under the Land Use Plan until all the requirements for Phase II development were met, mainly the Bodega Bay Bypass. Due to the lack of available highway funding, regulatory constraints, and other competing priorities, construction of the bypass is unlikely to be realized in the reasonably foreseeable future. As a result, the Bypass and the associated Phase II development it would have facilitated are no longer included in the Local Coastal Plan. **Figure C-LU-1j** shows the Bodega Bay Land Use Plan based on the Phase I Land Use Plan as described in the previous Local Coastal Plan. The Land Use Plan proposes a level of development consistent with current traffic and natural resource constraints in Bodega Bay.

The Bodega Bay Public Utilities District provides water supply and wastewater treatment for Bodega Bay. Water supply is a constraint to development at Bodega Bay. Water supply is adequate for existing and some additional development, but has not been sufficient for total approved development. The new Sand Dunes Well constructed in 2007 is expected to increase Bodega Bay Public Utility District water supply by 50 percent, sufficient for the planned population and development without the by-pass or additional Phase II units. The wastewater treatment plant is adequate for substantial additional development and is not a constraint to moderate future development.

Commercial Development. The California Coastal Act requires that visitor-serving commercial facilities have priority over private residential, general industrial, or general commercial development but not over agriculture or coastal dependent industry. The Land Use Plan proposes three types of commercial development for Bodega Bay: fishing

related in the Commercial Fishing land use category, visitor-serving in the Commercial Tourist land use category, and village commercial in the Commercial Service land use category.

The Land Use Plan accommodates a marina expansion of up to 300 berths, including Spud Point Marina; and designates 20 acres of land for fishing support facilities in the "Fishing Commercial" land use category. Fishing support facilities generally are to be located on the north and west sides of Bodega Bay, away from visitor-serving commercial facilities to minimize conflicts between commercial fishing and tourist activities.

Additional visitor-serving facilities are accommodated in the "Commercial Tourist" land use category. The Bodega Bay Land Use Plan recognizes existing facilities, including expansion of the Tides east of Highway 1, and designates six acres of land on Eastside Road as "Commercial Tourist".

Commercial facilities to meet the needs of local residents are currently inadequate. The Land Use Plan calls for development of a small Village Commercial center between Taylor Tract and the major proposed residential development area. The center would accommodate a post office, fire station, retail shops, bank, community center, and similar uses. This location minimizes need for vehicular travel.

Residential Development. Residential development in Bodega Bay would be accommodated through buildout of existing vacant residential lots in the community at the edge of town. To encourage construction of new affordable and moderate housing in Bodega Bay, the Local Coastal Plan proposes three approaches:

- (1) Designate the Urban Residential area located immediately south of the Inn at the Tides as a Housing Opportunity Area where a density bonus, consistent with the Affordable Housing Policy may provide additional affordable housing units.
- (2) Provide areas for temporary camping in RVs for transient fishermen on lands designated Commercial Fishing.
- (3) Encourage the development of Accessory Dwelling Units on qualifying residential parcels in the Coastal Zone.

Design guidelines for the area adjacent to Bodega Bay are proposed to maintain the character of the existing town in the new development area by limiting building size and height, road widths, and improvements.

Rural residential land use designations on the edge of Bodega Bay provide a transition between agriculture and urban levels of development. The rural residential designation with five acre densities between the older town and Bodega Harbor is essentially to

reserve this area for possible future urban development once planned development areas buildout.

The Bodega Bay Urban Service Boundary Area generally includes the approved units of the Bodega Harbor Subdivision, developed areas of Bodega Bay, newly designated residential areas south of the existing town between State Highway 1 and the former Bodega Bay Bypass route, and land within the Bodega Bay Public Utilities District service area between the former bypass route and Bodega Harbor.

GOAL C-LU-4: **Plan and design new development in Bodega Bay for appropriate lands, contingent on availability of public services, and so as to maintain local resources.**

Objective C-LU-4.1: Provide most of the new housing in Bodega Bay. Provide residential development in rural areas at very low densities to maintain local resources.

Objective C-LU-4.2: Balance residential and commercial development in Bodega Bay where adequate public services allow for residential and commercial expansion. Encourage a mix of price and rent levels.

Objective C-LU-4.3: Designate Bodega Bay the major retail and service center for the Coastal Zone.

Objective C-LU-4.4: Limit new industrial development in Bodega Bay primarily to the commercial fishing and other industries which depend on the marine environment and resources.

The following policies shall be used to achieve these objectives:

Policy C-LU-4a: All new development within the Urban Service Area Boundary of Bodega Bay shall be served by the Bodega Bay Public Utility District. **(Existing LCP Revised)**

Policy C-LU-4b: Encourage the provision of new affordable housing units by the following means: 1) designate the primary residential area south of old town Bodega Bay as a Housing Opportunity Area, and 2) provide areas for temporary vehicle camping in RVs for transient fishermen on lands designated Commercial Fishing. **(Existing LCP Revised)**

Policy C-LU-4c: New development proposed within the Bodega Bay Urban Service Area shall require the applicant to provide evidence in the form of a letter from Bodega Bay Public Utility District of an adequate water supply to serve the development. If an adequate water supply is not available to serve all planned development, development shall be limited by implementing a system for allocating building permits according to

the available water supply, or the development shall be contingent upon provision of additional water supplies. **(Existing LCP Revised)**

Policy C-LU-4d: A commercial tourist project in the Recreation land use category in Bodega Bay may be allowed if it can meet all LCP provisions, visual design guidelines, preserve on-site trees for wildlife habitat, and mitigate adverse traffic impacts. Any commercial tourist project proposed for Harbor Loop Road (also known as Smith Brothers Road) area shall be considered only in connection with a comprehensive development plan for the entire Harbor Loop Road area. **(Existing LCP Revised)**

Policy C-LU-4e: A Commercial Tourist (CT) land use category has been applied on the parcels occupied by the Bodega Harbor Inn (Assessors Parcels 100-080-070, 100-080-016 and 100-080-017) only to accommodate the historic and ongoing use of the property as a 15-unit motel. To ensure compatibility with the surrounding residential area, no other uses permitted in the CT Zone are allowed and any structures that exceed 16 feet in height shall not be permitted. Design review shall be required on any new construction outside of the existing building footprints. **(Existing LCP Revised)**

Policy C-LU-4f: Consider requiring intersection improvements at State Highway 1 and Eastside Road and/or Bay Flat Road as a condition of approval of development along Eastside Road. **(Existing LCP)**

3.3 Affordable Housing Policy

The major goal of this Affordable Housing section is to protect and promote low and moderate cost housing in the Coastal Zone to support California Coastal Act policies regarding housing, access, and Coastal Zone priority uses. Visitor-serving commercial development, agricultural production, and coastal-dependent uses, are all, to varying degrees, dependent on the availability of accessible seasonal and year round housing opportunities for persons operating or employed in these industries. Transit service to the Coastal Zone is limited. The nearest incorporated city, Sebastopol, is more than 10 miles from the edge of the coastal zone and more than 15 miles to Bodega Bay, the most populous area of the Sonoma Coast. High coastal property values and the remote nature of the Sonoma County Coastal Zone are unique considerations for affordable and workforce housing policies. This Local Coastal Program is intended to encourage housing opportunities for persons of low and moderate income, improve coastal access, and to support workforce housing opportunities related to agriculture, visitor serving, and coastal dependent resource uses.

The County's General Plan Housing Element sets out countywide goals, objectives, policies and programs to encourage a diverse housing stock to meet the needs of households at all income levels, especially for the lower income and special needs populations. Relevant housing policies from the state-certified Housing Element which are applicable in the Coastal Zone have been incorporated into this section.

A review of permit records from 2000 to 2014 shows that 562 dwelling units have been built in the Coastal Zone. Of the new dwelling units there were 532 single-family dwelling units, 1 second unit, 28 multi-family housing of 2-4 units, and one agricultural employee unit. Two dwelling units were demolished over the 14-year period for a net increase of 560 units. Over this time period no manufactured homes or multi-family housing greater than 4 units were constructed.

Existing affordable housing units in the Sonoma County Coastal Zone can be found at The Sea Ranch and in Bodega Bay. There are 45 lower income rental units that were required as part of a 300-unit expansion of The Sea Ranch development. In July 1982, The Sea Ranch Precise Development Plan and Policy Statement as adopted by the Sonoma County Board of Supervisors included a requirement for 45 units of "employee housing," subsequently changed to "affordable housing," to be located in Unit 35-D at the northeast corner of The Sea Ranch. In 1985 Oceanic California Inc. recorded annexation of The Sea Ranch expansion lots with affordability covenants to implement The Sea Ranch Employee Housing Program for 45 units. Built in 1993 by the Burbank Housing Sea Ranch Corporation, the 45 units consist of the following: 8 very low income (at or below 50 percent of median income) units, 31 low income (at or below 60 percent of median income) units, and 12 low income (at or below 80 percent of median income) units. The subdivision agreement for the affordable housing development requires 22 of the 45 units to be rentals; as of June 2015, all 45 units were affordable rentals.

The affordable housing at the Harbor View Subdivision in Bodega Bay was required under Coastal Permit CP93-289 for the subdivision of 25 acres into 70 single-family residential parcels averaging 7,300 square feet. Built in 2009 by the developer Harbor View Village consists of 14 low income (80 percent of medium income) rental units on one parcel.

Two of the available affordable housing sites listed in the Type C Housing Site Inventory compiled as part of the 201 Housing Element Update are located in the Coastal Zone. Both sites are in Bodega Bay (APNs 100-200-037 and 100-180-022); they have a combined net potential for 150+ Type C units if the units are clustered.

GOAL C-LU-5: Preserve and enhance affordable housing opportunities on the Sonoma County coast.

Objective C-LU-5-a: Protect existing affordable housing units and encourage development of additional affordable housing in urban areas.

Objective C-LU-5-b: Promote the development of affordable housing to meet a range of for-sale and rental housing needs including agricultural employee housing, accessory dwellings, senior housing and accessible units.

The policies below shall be used to achieve these objectives:

Policy C-LU-5a: Continue all existing County and Community Development Commission sponsored funding programs, including but not limited to Community Development Block Grant (CDBG), HOME, Low/Moderate Income Housing Asset Funds (LMIHAF), and County Fund for Housing (CFH) funding programs. Continue to require that at least 30 percent of the units assisted with County funds be affordable to extremely-low income households. Evaluate these existing programs in view of changing housing needs and policies, and seek opportunities for program expansion and more efficient use of limited resources. **(New: HCD certified General Plan 2014 Housing Element Policy HE-1a)**

Policy C-LU-5b: Continue the County's existing density bonus programs, including the state density bonus program and the County's programs. Continue to evaluate these programs in view of changing housing needs and policies, and expand or modify as needed to increase opportunities for housing. **(New: HCD certified General Plan 2014 Housing Element Policy HE-1b)**

Policy C-LU-5c: Ensure that design review, development standards, and conditions of approval for affordable housing projects do not result in a reduction of allowable project density or in the number of affordable units, unless the project as proposed would result in adverse impacts, and there is no other feasible method to mitigate the adverse impacts. **(New: HCD certified General Plan 2014 Housing Element Policy HE-1c)**

Policy C-LU-5d: Encourage retention and further construction of small rental units such as Accessory and Junior Dwelling Units and single room occupancy units, as well as large rental units with more than 3 bedrooms. **(New: HCD certified General Plan 2014 Housing Element Policy HE-1f)**

Policy C-LU-5e: Continue to administer the County's Mobile Home Rent Stabilization Ordinance. **(New: HCD certified General Plan 2014 Housing Element Policy HE-1g)**

Policy C-LU-5f: Continue to apply state law to Mobile Home Park Conversions to Resident Ownership, including implementation of SB 510 (Jackson 2013), in order to ensure that residents are afforded full consideration and all protections under the law. **(New: HCD certified General Plan 2014 Housing Element Policy HE-1h)**

Policy C-LU-5g: Prohibit the use of Accessory Dwelling Units for Transient Occupancy, occupancy of less than 30 days. **(New: HCD certified General Plan 2014 Housing Element Policy HE-1i)**

Policy C-LU-5h: Provide for two types of Housing Opportunity Areas in addition to, and not in lieu of, provisions of state and federal law as follows, and consistent with all other policies of the LCP:

- (1) The Type "A" Rental Housing Opportunity Program allows a density between 12 and 30 units/acre as long as affordability levels are met - at least 40% of total units as affordable to Low or Very Low Income households. Type "A" Rental Housing Opportunity Areas are established on sites which have a Local Coastal Plan medium density residential designation (Urban Residential 6-12 dwelling units/acre) and are zoned R2 (Medium Density Residential). The residential density for a Type "A" project may be increased to 100 percent above the mapped designation to a maximum density of 24 dwelling units/acre. Development standards used for Type "A" housing projects allow increased height, reduced parking requirements, and less stringent setbacks so long as privacy is maintained.
- (2) The Type "C" Ownership Housing Opportunity Program allows a density of 11 units per acre for ownership housing projects as long as affordability levels are met - 20% affordable to Low Income households and 80% affordable to Moderate Income households. Type "C" Housing Opportunity Areas are established on sites which have a Local Coastal Plan low density residential designation (Urban Residential 1-6 dwelling units/acre). The residential density for a Type "C" project may be increased to almost 100 percent above the mapped designation to a maximum density of 11 dwelling units/acre.
- (3) Rental Housing Opportunity Type "A" and Ownership Housing Opportunity Type "C" projects shall comply with all applicable provisions, including development standards and long-term affordability requirements, of Chapter 26C (Coastal Zoning Ordinance) of the Sonoma County Code.
- (4) Housing Opportunity Type "A" and Type "C" programs shall apply to housing development consisting of five or more dwelling units. **(Existing LCP Revised per HCD certified General Plan 2014 Housing Element)**

Policy C-LU-5i: Encourage a mix of low and moderate income housing units, and rental and sale units. Encourage diverse unit design including visitability and universal

design. **(Existing LCP Revised per HCD certified General Plan 2014 Housing Element)**

Policy C-LU-5j: Continue to encourage affordable “infill” projects on underutilized sites within Urban Service Areas by allowing flexibility in development standards pursuant to state density bonus law [California Government Code Section 65915, including subsection (m)]. **(New: HCD certified General Plan 2014 Housing Element Policy HE-3j)**

Policy C-LU-5k: Require long-term Affordable Housing Agreement for affordable housing units. **(Existing LCP Revised)**

Policy C-LU-5l: For parcels located within an area designated Urban Residential 1-6 dwelling units/acre which are large enough in area to permit more than one dwelling but cannot meet subdivision criteria due to shape or other similar constraint, permit clustering of dwelling units consisting of detached single-family dwelling units subject to the density limitations of the Local Coastal Plan Land Use Maps and issuance of a Use Permit. **(Existing LCP Revised per HCD certified General Plan 2014 Housing Element)**

Policy C-LU-5m: Concentrate housing production efforts in areas where public sewer and water service are available. **(Existing LCP)**

Policy C-LU-5n: Continue to permit transitional and permanent supportive housing in all residential land use categories. The construction of new dwelling units for such purposes shall conform to the Local Coastal Plan densities and to all other applicable provisions of the Coastal Zoning Ordinance. No standards shall be applied to transitional or supportive housing that do not also apply to other dwelling units within the same zone. **(New: HCD certified General Plan 2014 Housing Element Policy HE-5g)**

Policy C-LU-5o: Prohibit the demolition of housing for persons of low and moderate income, unless such demolition would be coupled with subsequent reconstruction of replacement housing of comparable rental value. Demolition may be permitted in advance of the replacement housing if the Director determines that the removal of the unit(s) is necessary to protect public health and safety. **(Existing LCP Revised)**

Policy C-LU-5p: Prohibit conversion of rental units currently providing low and moderate income housing opportunities unless the conversion provides a greater affordable housing opportunity. **(Existing LCP)**

Policy C-LU-5q: Consistent with state law, the following criteria shall be considered when evaluating an application for condominium conversion:

- (1) The surplus of vacant multifamily residential units offered for rent or lease must be in excess of 5 percent of the available multifamily rental stock in the community in which the proposed project is located.
- (2) At least 30 percent of the units included in the proposed condominium conversion must be reserved for sale to Low and Very Low Income households by means of an Affordable Housing Agreement to ensure that such units remain affordable to Very Low and Low Income households for the maximum period allowed by law.
- (3) Tenants must be granted the right of first refusal concerning the purchase of the units. Tenants who are 60 years or older should be offered lifetime leases. Tenants not qualifying for lifetime leases must be offered a 10-year lease. The subdivider must provide a plan to assist in relocating tenants displaced by the conversion to comparable rental housing. **(Existing LCP Revised per HCD certified General Plan 2014 Housing Element)**

Policy C-LU-5r: Allow Accessory Dwelling Units as specified in the Coastal Zoning Ordinance. **(Existing LCP)**

Policy C-LU-5s: Changes in use or closure of a mobile home park shall comply with state law and require a Use Permit. **(New: HCD certified General Plan 2014 Housing Element Policy HE-1m)**

3.4 Visitor-Serving Commercial Facilities Policy

Recreational uses require support facilities such as motels, restaurants, grocery stores, auto service stations, and public restrooms. This section of the Public Access Element inventories existing visitor-serving and local-serving facilities, identifies areas suitable for their development, and recommends the type of and location for these facilities.

The California Coastal Act of 1976 encourages providing support facilities for visitors to the coast, especially those available to the public at a moderate cost.

Ocean-dependent industry, which includes coastal tourism and recreation, makes a substantial contribution to the State's economy. The California coastline includes a diverse group of ocean-dependent economies ranging from densely populated urban areas such as Los Angeles to small rural communities such as Bodega Bay in Sonoma County. These coastal economies all depend on the ocean to varying degrees. While coastal recreation activities themselves have direct commercial value, they also result in significant consumer expenditures on food, transportation, accommodations, and other recreation-related goods and services. In 2018, 24 percent of all tourism business was located in unincorporated Sonoma County and not in one of the nine incorporated jurisdictions. These unincorporated communities include the coastal communities of Bodega Bay, Jenner, and The Sea Ranch, along with other smaller towns. Based on a

respondent generated survey, lodging, which includes a wide variety of classifications like full service lodging, vacation rentals, and campgrounds, contained the greatest percentage of tourist industry business for the County, at 25 percent and just above wineries at 33 percent.

3.4.1 Existing Visitor-Serving Commercial Facilities

Below are the definitions of visitor-serving versus local-serving commercial facilities:

- (1) Visitor-serving commercial facilities or uses include development that provides basic support services for visitors such as motels, restaurants, grocery stores, auto service stations, and public restrooms. Most of these facilities on the Sonoma County coast are both visitor-serving and local-serving.
- (2) Local-serving commercial facilities or uses include all other private commercial development that provides for the needs of the local population such as professional offices, utilities, banks, and fishing industry support services.

Visitor-serving and local-serving commercial facilities accessible to the Sonoma County coast are concentrated primarily in The Sea Ranch, Bodega Bay, and Gualala in Mendocino County. These areas are the most suitable for expanding visitor-serving commercial facilities due to the availability of public services and existing development. Other small service centers are scattered along the Sonoma County coast and just inland. Jenner and Duncans Mills on the North Coast and Valley Ford on the South Coast are secondary locations along the coast with isolated services (i.e., spot commercial services such as single grocery stores).

The Sea Ranch

The Sea Ranch has very limited commercial facilities and depends primarily on neighboring Gualala in Mendocino County to serve residents' needs. Appropriate locations for additional commercial development to serve The Sea Ranch are the clubhouse at the golf course, Annapolis Road near the Sea Ranch Airstrip where existing commercial uses are located, and adjacent to The Sea Ranch Lodge. Many homes at The Sea Ranch are rented out through a vacation home rental program.

Stewarts Point

North of Jenner and two miles south of The Sea Ranch on State Highway 1, Stewarts Point has public restrooms and a general store that sells gasoline. Some expansion of these visitor-serving uses, including lodging, may be appropriate at Stewarts Point if it is designed to be consistent with the historic character of the area.

Timber Cove/Fort Ross Area

Ocean Cove. The Ocean Cove Resort is located immediately south of Salt Point State Park and the Salt Point Lodge and restaurant. The property contains a small general store, cabins, and residence on the east side of State Highway 1; and a developed campground with 100 sites, gas pumps, parking lot, and boat launch access to the cove on the west side of State Highway 1. A suitable location for a new facility on the property would be east of State Highway 1, near the Ocean Cove Store and behind a grove of eucalyptus trees that would provide screening. Indoor accommodations or camping should be considered at this location combined with public day use of the sheltered cove. A public horse stable may also be an appropriate use for a small portion of the grassland near the store because Salt Point State Park has miles of riding trails that are immediately accessible from this location. The day use area on the west side of State Highway 1 should include improving the boat launch and picnic facilities with parking on the east side of State Highway 1.

Stillwater Cove. Just south of Ocean Cove Resort is Stillwater Cove Ranch, a former boys' school now open as a small guest ranch. The Ranch is situated away from State Highway 1 and has room for modest expansion of the existing facilities. This parcel also has room for a public horse stable if connecting access through the Ocean Cove property to Salt Point State Park riding trails can be obtained.

Timber Cove. The Timber Cove Inn is the largest overnight facility between The Sea Ranch Lodge and Bodega Bay, and includes a major restaurant and bar. Except for improved public access and parking facilities, the potential for expanding the Inn at this location is limited by septic capability, proximity to the bluff and potential habitat area. The Timber Cove Boat Landing and campground provides comprehensive services to divers on the Sonoma County coast.

Fort Ross. The Fort Ross Store is located at Windermere Point, south of Timber Cove and north of Fort Ross. It is the only grocery between these two points and includes a deli with seating. West of State Highway 1 in this location and adjacent to Fort Ross State Park is the Fort Ross Lodge, a motel with 16 units.

Jenner

Jenner has a restaurant, motel, two bed and breakfast inns, post office, gas station, and other community services. Additional inns, hostels, or similar facilities would be in keeping with Coastal Act policies which encourage visitor-serving facilities in existing developed areas. Served by a mutual water system, there is a moratorium on water hookups due to inadequate water supplies.

Duncans Mills

Duncans Mills is primarily a visitor service center, providing basic tourist support facilities including a general store, restaurant, wine tasting room, bakery, shops, post office, rodeo site, three campgrounds, and sportsmen's club. A private water system serves the community, but there is no sewer system and flooding is a seasonal problem. Expanding the commercial facilities may be possible if septic system requirements can be met.

Bridgehaven

Bridgehaven once had a restaurant, motel, and camping, but presently has only several permanent mobile homes and trailers. Neither public access nor camping is allowed. If changes to this use are requested, efforts shall be made to acquire public access, particularly if the existing trails are prescriptive.

Bodega Bay

Bodega Bay contains several motels, many of which have been expanded since the last Local Coastal Plan was adopted. There may be opportunities for expanding motels, bed and breakfast inns, and guest ranches provided adequate public services are available. Bodega Bay also provides many local and visitor-serving commercial services such as grocery stores, restaurants, gift shops, and art galleries. Many homes in the Bodega Harborview Subdivision are vacation homes.

Valley Ford

Valley Ford is a small community center for dairies in southwestern Sonoma County, providing basic commercial and tourist services. A restaurant, café, market, and hotel provide food service; and gasoline and vehicle repair are available. Valley Ford has a moratorium on connections to its water system. Modest expansion of commercial services would be appropriate if water service becomes available and septic system requirements can be met. One inn, Sonoma Coast Villas, has been developed on agricultural land between Valley Ford and Bodega Bay. There may be other sites with potential for lodging in the area.

Three visitor centers serve the North Coast: Redwood Coasts Chamber of Commerce in Gualala; Russian River Chamber of Commerce and Visitor Center in Guerneville; and Jenner Visitors' Center in Jenner. The South Coast is served by the Sonoma Coast Visitor Center in Bodega Bay. There are an estimated 600 vacation rentals in the Coastal Zone; most of which are located at The Sea Ranch, Jenner and Bodega Bay.

Tables C-LU-4 and C-LU-5 provide summaries of visitor serving overnight accommodations in the Coastal Zone.

Table C-LU-4: North Coast Overnight Accommodations

Facility	Hotel/Motel Rooms	Campground Spaces
Gualala Point Regional Park		8
Salt Point State Park		160 ²
Ocean Cove - private campground		175
Sea Ranch Lodge	19	
Ocean Cove Lodge Bar & Grill	16	
Stillwater Cover Regional Park		23
Timber Cove - private campground		25
Timber Cove Lodge	42	
Fort Ross State Historic Park Unit		21
Fort Ross Reef Campground		21
Fort Ross Lodge	22	
Duncans Mills Campground		125
Inn at Duncans Mills	5	
River's End	5	
Jenner Inn & Cottages	21	
Seacliff Motel ¹	16	
Surf Motel ¹	20	
Breakers Inn ¹	28	
Gualala Country Inn ¹	19	
Gualala River Redwood Park ¹		111
Total in North Coast	130	527
Notes:		
¹ Located in Mendocino County's Coastal Zone, within 1.5 miles of the Sonoma-Mendocino county line.		
² Includes 20 overflow campground spaces.		

Table C-LU-5: South Coast Overnight Accommodations

Facility	Hotel/Motel Rooms	Campground Spaces
Bay Hill Mansion	5	
Bodega Bay Inn	5	
Bodega Bay Lodge	83	
Bodega Bay Coast Inn & Suites	44	
The Inn at the Tides	85	
Bodega Harbor Inn	16	
Casini Family Ranch		225

Table C-LU-5: South Coast Overnight Accommodations (continued)

Facility	Hotel/Motel Rooms	Campground Spaces
Sonoma Coast State Park Unit – Willow Creek Campground		11
Sonoma Coast State Park Unit – Wrights Beach Campground		27
Sonoma Coast State Park Unit – Pomo Canyon Campground		20
Sonoma Coast State Park Unit – Bodega Dunes Campground		98
Westside Regional Park		47
Doran Beach Regional Park		139
Valley Ford Hotel	6	
Total in South Coast	244	556

GOAL C-LU-6: Encourage Public Access and visitor serving uses in the Coastal Zone.

Goal C-LU-6.1: Establish adequate commercial services for visitors on the Sonoma County coast where such development can be accommodated with minimal impacts on views and natural resources.

Objective C-LU-6.1: Identify and develop new or expand existing commercial services for visitors in urban service areas and rural communities.

The following policies, in addition to those in the Agricultural Resources Element, and Public Access Element, shall be used to achieve these objectives:

Planning and Reviewing Visitor Serving Development

Policy C-LU-6a: Encourage the development and expansion of visitor-serving and local-serving commercial uses within urban service areas and rural community boundaries where water supply and wastewater disposal requirements can be met. **(Existing LCP Revised)**

Policy C-LU-6b: Limit new visitor-serving commercial development to areas within designated urban service areas and rural community boundaries except for the lowest intensity development (i.e., guest ranches, and bed and breakfast inns, vacation rentals, and agricultural farmstays). **(Existing LCP Revised)**

Policy C-LU-6c: Provide public restrooms and drinking water facilities where needed and appropriate as part of visitor and local-serving commercial development. **(Existing LCP Revised)**

Encouraging Visitor Serving Development

Policy C-LU-6d: Consider modest scale expansion of existing visitor-serving and local-serving commercial uses outside of urban service areas and rural community boundaries where water supply and wastewater disposal requirements can be met. **(Existing LCP Revised)**

Policy C-LU-6e: Encourage the provision of modest scale overnight accommodations which have minimal impacts on the coastal environment, including bed and breakfast accommodations in existing homes, guest ranches, inns, and motels. Guest ranches in agricultural areas shall be compatible with continued ranch operations and be limited to the allowable residential density. **(Existing LCP Revised)**

Policy C-LU-6f: Encourage expansion of overnight accommodations and other visitor-serving commercial uses; and local-serving commercial uses on Annapolis Road. **(Existing LCP Revised)**

Policy C-LU-6g: Encourage development of limited visitor-serving and local-serving commercial uses at Stewarts Point designed to complement the historic character of the community. **(Existing LCP Revised)**

Policy C-LU-6h: Encourage modest scale expansion of existing or certain new visitor-serving commercial uses east of State Highway 1 near the Ocean Cove Store including overnight accommodations and a public horse stable. **(Existing LCP Revised)**

Policy C-LU-6i: Limit development west of State Highway 1 at the Ocean Cove Resort to a strictly controlled day use area and campground. Any development proposals should include provisions for pedestrian safety on State Highway 1, erosion control measures, rehabilitating the degraded bluffs at the cove, and if needed the provision of parking for development consistent with Policy LU-6h. **(Existing LCP Revised)**

Policy C-LU-6j: Encourage adaptive reuse of the historic barn west of State Highway 1 at the Ocean Cove Resort. **(Existing LCP Revised)**

Policy C-LU-6k: Encourage modest scale expansion of existing inn facilities and development of a public horse stable at the Stillwater Cove Ranch. **(Existing LCP Revised)**

Policy C-LU-6l: Limit expansion at the Timber Cove Inn to improved parking and public access facilities. **(Existing LCP Revised)**

Policy C-LU-6m: Encourage provision of screening and other design improvements at the Timber Cove Boat Landing. **(Existing LCP Revised)**

Policy C-LU-6n: Allow limited new or expansion of existing visitor or local-serving commercial uses, in the vicinity of the Fort Ross Store, subject to design controls review to preserve the area's scenic character. **(Existing LCP Revised)**

Policy C-LU-6o: Encourage a modest infill of visitor and local-serving commercial development in Jenner if water supply and wastewater treatment and disposal requirements can be met. **(Existing LCP Revised)**

Policy C-LU-6p: Encourage provision of overnight accommodations of modest scale and cost and expansion of other visitor and local-serving commercial services uses at Duncans Mills. **(Existing LCP Revised)**

Policy C-LU-6q: Encourage expansion of the Bridgehaven Resort, by adding boat rentals and launching and day use facilities subject to design review. Require public access as a condition of for approval of any Coastal Permit for expansion of uses at the resort. **(Existing LCP Revised)**

Policy C-LU-6r: Encourage new and expansion of existing commercial uses in Bodega Bay. Encourage expansion of Chanslor Ranch consistent with continued agricultural use if water supply and wastewater treatment and disposal requirements can be met. **(Existing LCP Revised)**

Policy C-LU-6s: Encourage modest expansion of commercial uses in Valley Ford if water supply and wastewater treatment and disposal requirements can be met. **(Existing LCP Revised)**

4. IMPLEMENTATION PROGRAMS

4.1 Land Use Implementation Programs

Program C-LU-1: Establish standards for the use of existing residences for vacation rentals and hosted rentals. In developing standards consider; requirements for designated property managers, safety, the number of guests allowed for day time and nighttime occupancy, parking, noise, and advertisements. **(New: HCD certified General Plan 2014 Housing Element Policy HE-1k Revised)**

Program C-LU-2: Draft an ordinance to allow workforce/employee housing in the coastal zone. The ordinance is intended to support coastal priority land uses including commercial fishing, resource dependent uses, recreation, and visitor serving commercial uses. Ensure that workforce/employee housing supports priority uses, is scaled and

located appropriately for the size of the supported use and surrounding neighborhood, protects coastal resources and scenic views, has adequate water and waste management, supports reduction of greenhouse gas emissions, and is not vulnerable to climate change related impacts including coastal bluff erosion and sea level rise for the life of the project. **(New)**

Program C-LU-3: Consider developing a parking management program for Bodega Bay commercial areas. **(New)**

4.2 Other Initiatives

Other Initiative C-LU-1: Encourage service providers to retain adequate sewer and water service capacities for housing units affordable to Moderate and Low Income households. **(New: HCD certified 2014 Housing Element Policy HE-2h)**

Other Initiative C-LU-2: Encourage development of employer provided or subsidized affordable housing for employees. **(Existing LCP)**

Other Initiative C-LU-3: Consider increasing funding priority for the acquisition of affordable units or subsidies. **(New: HCD certified General Plan 2014 Housing Element Policy HE-1e)**

Other Initiative C-LU-4: Conserve the existing affordable housing stock by providing funding through the Community Development Commission to nonprofit organizations to subsidize the acquisition of at-risk properties where those units will be restricted to long-term occupancy by low, very-low and extremely-low income households. **(New: HCD certified General Plan 2014 Housing Element Policy HE-1d)**

Other Initiative C-LU-5: Expand collection of data on visitor use of public access facilities and the methods used for monitoring visitor use patterns, to adjust to increasing demand for facilities and to assist in identifying needs for additional facilities. **(New)**

PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

AGRICULTURAL RESOURCES ELEMENT September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

AGRICULTURAL RESOURCES ELEMENT

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AGRICULTURAL RESOURCES ELEMENT

1. INTRODUCTION

1.1 Purpose

To acknowledge the importance of agricultural production within the Sonoma County coast, an Agricultural Resources Element is included in this Local Coastal Plan.

The policies of the California Coastal Act protect the productive resource base, establishing agriculture as a priority use and emphasizing the retention of agricultural land in production.

The Agricultural Resources Element defines agriculture as an industry that produces and processes food, fiber, and plant materials; and includes the raising and maintaining of farm animals including horses, donkeys, mules, and similar livestock. There are no prime agricultural areas in the Coastal Zone. All of the other agriculturally designated lands are considered non-prime grazing lands. The purpose of the Agricultural Resources Element is to establish policies to ensure the protection and maintenance of agriculture for its economic, environmental, and social values. The Element is intended to provide clear guidelines for decisions in the two agricultural zones within the Coastal Zone - Diverse Agriculture (DA) and Land Extensive Agriculture (LEA) - as well as areas where agricultural land uses exist in the Resources and Rural Development (RRD) and Agricultural Residential (AR) zones. The Agricultural Resources Element establishes goals, objectives, and policies to protect and sustainably manage coastal agricultural resources. Programs needed to implement proposed policies are also identified. In addition, the Element calls out ongoing or potential future County initiatives, referred to as "Other Initiatives," that support Sonoma County's agricultural character and promote inter-agency and community collaboration. If future technology or enterprises in the agriculture industry requires alternative and yet unforeseen policies and implementation mechanisms, those should be consistent with the County's commitment to encourage maintaining a healthy agriculture sector of the County's economy.

Concerns regarding future agricultural uses in the Coastal Zone include a potential increase in vineyard planting. Vineyard development raises concerns over the potential for impacts to Environmentally Sensitive Habitat Areas (ESHAs), to water quality and quantity, as well as conversion of forest lands and added pressure for development of agricultural support uses (agricultural processing and services). Secondary impacts to public services and traffic from agricultural support uses are also concerns. Future predicted climate change may alter growing conditions that further increase the pressure for vineyard development.

1.2 Relationship to Other Elements

General policy direction for land use decisions in agricultural areas is expressed in the Land Use Element under the Land Extensive Agriculture (LEA) and Diverse Agriculture (DA) land use categories. Other policies related to resource values for Biotic Resources and Scenic Resources are found in the Open Space and Resource Conservation Element. The Water Resources Element includes policies related to water quality and quantity.

1.3 Scope and Organization

This Agricultural Resources Element has four sections: Introduction, Background, Policies, and Implementation Programs. The Background section provides context for the Policies. The Policies section includes Goals, Objectives, Policies and Other Initiatives. Policies expressed in the Agricultural Resources Element are intended to apply only to lands in these two land use categories.

2. BACKGROUND

Figures C-AR-1a through C-AR-1k show the Agricultural Resources in the ten SubAreas of the Sonoma County coast. **Table C-AR-1** lists the area of agricultural land categories by SubArea. The percentage of the total land area for each Subarea for land categories is also provided. According to the California Department of Conservation, Farmland Mapping and Monitoring Program 2012 Important Farmlands dataset, there are no Prime Farmland, Farmland of Statewide Importance, or Unique Farmland on the Sonoma County coast. Grazing Land and Farmland of Local Importance occupy about 25,986 and 2,155 acres of the coast, respectively. Grazing Land occurs in all SubAreas except The Sea Ranch North. The largest acreage and highest percentage of Grazing Land are in the Bodega Bay and Valley Ford SubAreas, respectively. Farmland of Local Importance is located in all ten SubAreas. The largest acreage and highest percentage of Farmland of Local Importance are in the Salt Point and The Sea Ranch North SubAreas, respectively.

Farmland of Local Importance is farmland other than Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. In Sonoma County, Farmland of Local Importance includes inland hay producing lands and lands with the capability for producing locally important crops but may not be planted at the present time. This land may be important to the local economy due to its productivity or value, as defined by the Board of Supervisors. Authority to adopt or to recommend changes to the category of Farmland of Local Importance rests with the Board of Supervisors in each county.

Table C-AR-1: Acreage of Important Farmlands by SubArea on the Sonoma County Coast

Subarea	Farmland of Local Importance (acres)	Grazing Land (acres)	Urban & Built-Up Land (acres)	Other Land (acres)	Water (acres)	Total (acres)
1 – The Sea Ranch North	381	0	515	2,066	0	2,962
2 – The Sea Ranch South	323	40	755	1,674	0	2,792
3 – Stewarts Point/Horse-shoe Cove	83	775	1	2,300	0	3,158
4 – Salt Point	492	88	0	5,278	0	5,859
5 – Timber Cove/Fort Ross	159	2,595	37	4,869	0	7,659
6 – High Cliffs/ Muniz-Jenner	143	2,081	68	800	309	3,401
7 – Duncans Mills	32	780	142	215	120	1,290
8 – Pacific View/Willow Creek	99	7,164	191	4,420	1	11,875
9 – Bodega Bay	0	7,519	831	1,806	0	10,156
10 – Valley Ford	485	4,871	63	47	0	5,465
Total	2,196	25,913	2,602	23,475	430	54,617
Percent of Total	4%	47%	5%	43%	1%	

About one third of the Sonoma County coast is used for sheep and cattle grazing or dairies. Grassland suitable for sheep and cattle grazing is found along the coastal terrace and lower slopes on the northern coast and throughout the coast south of Jenner. Dairies primarily occur in the Valley Ford SubArea. The climate and topography of western Sonoma County have largely resulted in the dominance of the grazing industry. The cool, moist climate generally produces better rangeland than inland, reducing the need for supplemental feed and irrigated pasture.

As of 2017, there are no wineries located in the Coastal Zone, although two are located within a mile of the inland Coastal Zone boundary. Similarly, there are no vineyards, currently planted or proposed within the Coastal Zone. While the non-prime soils and lack of year-round water supply generally do not benefit the cultivation of some crops, the entire Coastal Zone has been designated within the Sonoma Coast American Viticulture Area (AVA), including lands outside the Coastal Zone. In 2011 the Alcohol and Tobacco Tax and Trade Bureau approved establishment of the Fort Ross-Seaview American AVA, a small portion of which lies within the Coastal Zone in the vicinity of Fort Ross. Marine sedimentary soils, long sunny days, and cool maritime climate are highly regarded cool-climate growing regions in California. The production of grapes in the Coastal Zone is limited by thin soils, steep slopes and yields are low.

Many landowners on the Sonoma County coast have demonstrated a commitment to agriculture by entering into Land Conservation contracts. The California Land Conservation Act of 1965 (the Williamson Act) allows counties to establish agricultural preserves and thereby give tax reductions to landowners engaged in commercial agricultural operations. About 78 parcels totaling over 18,400 acres in the Coastal Zone are under Land Conservation contracts, primarily in the Bodega Bay-Valley Ford SubAreas.

The major issues affecting agricultural production on the Sonoma County coast are market conditions for raising cattle and sheep relative to land values, rising prices of coastal rural land, and predators such as coyotes. Pressure for conversion of agricultural uses to residential uses and conflicts between agricultural and non-agricultural uses also occur on the Coast, but to a substantially lesser degree than inland. Conversion of grazing land to permanent cultivated crops may be a pressure in limited areas where soil and climate conditions may support vineyards or row crops, but water availability is a constraint.

The coast contains about 28,000 acres in the Agriculture land use categories.

2.1 Residential Subdivision Potential and Nuisances

Most of the agricultural land in the Coastal Zone is designated Land Extensive Agriculture with a maximum residential density of 160 acres per dwelling unit and a minimum parcel size of 640 acres, although a few areas are designated Diverse Agriculture with a maximum residential density of 40 acres per unit and a minimum lot size of 160 acres. Although these minimum lot sizes all but eliminated subdivision potential, some existing legal lots of record do not meet the minimums and are recognized through issuance of certificates of compliance. The Agricultural Resources Element establishes policies that maintain parcels in agricultural areas predominantly in sizes large enough to sustain a viable commercial agricultural operation.

While the subdivision potential of agricultural land in the Coastal Zone is very limited, there are a number of parcels that do not meet the minimum parcel size that were legally created by deed prior to the Local Coastal Plan adoption in 1981. Since the County established new Uniform Rules for Agricultural Preserves and Farmland Security Zones in 2013, certificates of compliance would not be issued for substandard parcels on contracted lands where they would result in residential development that is not incidental to agricultural or open space uses.

Complaints about noise, odors, flies, spraying and similar nuisances related to agricultural practices may discourage and sometimes prevent farmers from managing their operations in an efficient and economic manner. Not only will residents complain about aspects of farming operations, but residential areas often directly affect the operations. Clear policy is needed for County decision makers to balance the needs of the farmer with the concerns of residential neighbors and visitors. The Agricultural Resources Element establishes policies that support the needs and practices of agriculture as the highest priority in areas designated for agricultural use.

2.2 Conversion of Agricultural Uses

Recreational and other non-agricultural uses have replaced ranching operations in some coastal areas. Grazing land has been acquired by the California Coastal Conservancy, Sonoma Land Trust, Sonoma County Agricultural Preservation and Open Space District, and State Department of Parks and Recreation. Although these lands have not been subdivided, some park management agencies have taken the land out of agricultural production, reducing the agricultural land base on the Sonoma Coast. In other cases, some park and open space agencies have demonstrated that agricultural production is compatible with recreational use and can be a significant benefit for ecological management and cultural interpretation.

2.3 Agricultural Support Uses

Agricultural support uses include agricultural processing and agricultural services. Agricultural processing is the act of changing an agricultural product from its natural state to a different form including bottling, canning, packaging, and storing agricultural products (e.g., grapes to wine, apples to juice or sauce, etc.). Agricultural services include the maintenance and repair of farm machinery and equipment, veterinary clinics, custom farming services, agricultural waste handling and disposal, and other similar related services. As there is limited agriculture in the Coastal Zone, the need for agricultural support uses is also limited. The determination of which support uses belong on agricultural lands in the Coastal Zone involves their connection to agriculture; potential for conflicts; the size, scale and adaptability of the use; and the amount of land lost to farming. Policies are needed to permit agricultural support uses without adversely affecting production of agricultural products in the area and impacting community character. Policies for agricultural support uses should also balance the need for such uses with the continued preservation of the rural character of the Coast, and should support agricultural products produced on the Sonoma County coast over those produced elsewhere.

2.3.1 Agricultural Visitor-Serving Uses - Agricultural Tourism

While agricultural tourism has not been in high demand on the Sonoma County Coast, it may become so in the future. Tourism is already the major economic driver in the Coastal Zone and agricultural tourism could contribute to supporting the economic success of the agricultural industry on the Coast, provided that agricultural tourism directly promotes the sale of agricultural products grown on-site. However, the economic benefits of agricultural tourism must be balanced against existing constraints such as limited public services, water supply and sensitive resource areas and the potential impacts of increased traffic on public safety. In addition, visitor-serving uses must supplement agricultural production, and not displace it. The benefits and potential adverse impacts of visitor-serving uses vary by agricultural industry. Activities such as special events and tasting rooms that attract large numbers of customers are not considered appropriate in the coastal agricultural areas and are limited to the commercial areas within rural communities.

In the Land Extensive Agricultural areas, some conflicts between visitors and agricultural practices would be less severe due to the larger lot sizes that serve to separate the activities. In these areas, small scale visitor-serving uses that are directly related to the agricultural operation, such as farmstays, hosted rentals, farm stands, farm retail sales and some outdoor recreational uses may be compatible with the agricultural operation.

These small-scale uses promote the agricultural activity and provide a secondary income source for the farmer or rancher without hindering the primary agricultural use of the land. The Agricultural Resources Element includes policies that promote the County's coastal agricultural industry by allowing limited visitor-serving uses that are directly related to agricultural production in the Coastal Zone.

2.4 Farmworker Housing

Efficient management of agricultural production activities requires adequate numbers of employees to be housed on both a seasonal and a permanent basis. Farm related housing issues involve the location, amount and type of housing for seasonal employees, permanent employees and agricultural farm workers and their families. The Agricultural Resources Element establishes policies to allow limited amounts of housing to meet the various needs of farmworkers, farm operators, and family members engaged in the farming operation in addition to permitted residential density on the Sonoma County coast.

2.5 Farmers' Economic Situation

Competition between urban development and agriculture is not a major issue on the Sonoma County coast due to constraints of water supply and existing zoning. However, pressures on agricultural lands can discourage new agricultural investment and uses, raises the price of land making purchase for farming less realistic, and increases the likelihood of purchase for non-agricultural use. This competition creates a need for policies and protections that enable farmers to invest and reinvest in the agricultural production.

2.6 Aquaculture

Aquaculture and the fishing industry produce a food source and have needs similar to land based agricultural operations. Policy is needed to treat the support facilities of the aquaculture and fishing industries that relate to food production or harvesting in the same manner as those for other types of agriculture.

2.7 Impacts of Climate Change

Climate change will impact agriculture on the Sonoma County coast. Agriculture is highly dependent on specific climate conditions, and understanding the overall effect of climate change on agriculture can be difficult. Increases in temperature and carbon dioxide (CO₂) can be beneficial for some crops in some places. But to realize these benefits, nutrient levels, soil moisture, water availability, and other conditions must also be met. Changes in

the frequency and severity of droughts and floods could pose challenges for farmers and ranchers. Changes in temperature, amount of carbon dioxide, and the frequency and intensity of extreme weather could have significant impacts on crop yields.

Climate Change could affect animals both directly and indirectly. Extreme heat events, which are projected to increase under climate change, could directly threaten livestock. Drought may threaten pasture and feed supplies and reduce water availability for livestock. Climate change may increase the prevalence of parasites and diseases that affect livestock. Increases in carbon dioxide may increase the productivity of pastures, but may also decrease their quality.

Overall, climate change could make it more difficult to grow crops and raise animals in the same ways and same places as we have in the past. The effects of climate change also need to be considered along with other evolving factors that affect agricultural production, such as changes in farming practices and technology.

3. AGRICULTURAL RESOURCES POLICIES

3.1 Maintain Large Minimum Parcel Sized in Agricultural Lands

GOAL C-AR-1: **Maintain the maximum amount of agricultural land in parcel sizes that are large enough to sustain a viable commercial agricultural operation.**

Objective C-AR-1.1: Avoid the conversion of agricultural lands to residential or non-agricultural commercial uses.

Objective C-AR-1.2: In the Land Extensive Agriculture and Diverse Agriculture land use categories, maintain the largest land area for agricultural use. Limit the number of cluster lots on any one area to avoid the potential conflicts associated with residential intrusion.

The following policies, in addition to those in the Land Use Element, shall be used to achieve these objectives:

Policy C-AR-1a: The following criteria shall be used for approval of subdivisions on land designated Land Extensive Agriculture or Diverse Agriculture:

- (1) It is consistent with California Coastal Act which requires that (a) the maximum amount of agricultural land shall be maintained in agricultural production, (b) agricultural conversions shall be limited and evaluated on a case-by-case basis, and (c) land divisions outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

- (2) It does not diminish the productivity of the agricultural land.
- (3) The resulting parcels for agricultural use shall each be of a size that can support a viable agricultural operation per California Coastal Act Section 30241.5.
- (4) An open space or agricultural easement shall be applied to the parcels which remain in agricultural use. **(New)**

Policy C-AR-1b: Subdivisions on designated resource and agricultural lands shall be permitted only for development related to the pursuit of either agriculture or forestry, as appropriate; and only with mechanisms such as open space or agricultural easements to ensure the long-term protection of agriculture and resource production. **(Existing LCP Revised)**

Policy C-AR-1c: Agricultural compatibility and productivity shall be the primary considerations in parcel design and siting of development for subdivisions on lands designated Land Extensive Agriculture or Diverse Agriculture. **(Existing LCP Revised)**

Policy C-AR-1d: Amendments of the Land Use Map from an agricultural to a non-agricultural use category for the purpose of allowing increased residential density which may conflict with agricultural production shall be avoided. **(GP2020)**

Policy C-AR-1e: Implement minimum parcel sizes and other zoning standards to promote the productive and wise use of resources, as shown in **Table C-AR-2**. Minimum Parcel Size and Maximum Residential Density by Agricultural Land Use Category. Any land divisions outside of designated Rural Community or Urban Service Area boundaries and not otherwise regulated by the provisions of **Policy C-AR-1a** or Table C-AR-2 shall be permitted only where 50 percent of the useable parcels in the market area of the parcel have been developed and the created parcel would be no smaller than the average size of the surrounding parcels. **(Existing LCP Revised)**

Table C-AR-2: Minimum Parcel Size and Maximum Residential Density by Agricultural Land Use Category

Zone	Applicable Land Use Category	Minimum Parcel Size	Maximum No. of Dwelling Units per Parcel ¹	Maximum Permitted Residential Density (ac/unit) ²
LEA	Land Extensive Agriculture	640 acres	4	160
DA	Diverse Agriculture	160 acres	4	40
Notes: ¹ Applies to all types of dwelling units including single-family dwellings consistent with the residential density, farm family dwellings, full-time agricultural employee units, seasonal and year-round farmworker housing, and accessory dwelling units. ² Density does not apply to farm family dwellings, (LEA only), full-time agricultural employee units, seasonal and year-round farmworker housing, and accessory dwelling units				

3.2 Limit Intrusion of Urban Development

GOAL C-AR-2: **Maintain agricultural production by limiting intrusion of urban development on agricultural land.**

Objective C-AR-2.1: Limit intrusion of urban development in agricultural areas.

Objective C-AR-2.2: Maintain the Bodega Bay Urban Service Area Boundary and Rural Community Boundaries to protect agricultural land for continued agricultural production.

Objective C-AR-2.3: Limit extension of sewer and other urban services beyond the Bodega Bay Urban Service Area Boundary and Rural Community Boundaries.

The following policies, in addition to those in the Land Use Element, shall be used to achieve these objectives:

Policy C-AR-2a: Agricultural production shall be defined as the production of food, fiber, and plant materials including, but not limited to, growing, harvesting, crop storage, milking, etc.; and the raising and maintaining of horses, donkeys, mules, and similar livestock or farm animals for the purpose of farm operations. Commercial agricultural support uses and commercial equestrian uses are not considered agricultural production uses in this context. **(New)**

Policy C-AR-2b: The Land Extensive Agriculture and Diverse Agriculture land use categories shall be applied based on the capability of the land to produce agricultural products. **(GP2020)**

Policy C-AR-2c: Extension of urban services to lands in the Land Extensive Agriculture and Diverse Agriculture land use categories shall be limited to out-of-service area agreements to solve existing health and safety problems, unless allowed by the Public Facilities and Services Element or **Policy C-AR-7b** (aquaculture). **(GP2020)**

GOAL C-AR-3: **Allow farmers to manage their operations in an efficient, economic manner with minimal conflict with non-agricultural uses.**

Objective C-AR-3.1: Apply the Land Extensive Agriculture and Diverse Agriculture land use categories only to areas or parcels capable of the commercial production of food, fiber, and plant material; or the raising and maintaining of farm animals. Establish agricultural production as the highest priority use in these areas or parcels.

The following policies, in addition to those in the Land Use Element, shall be used to achieve these objectives:

Policy C-AR-3a: The primary use of any parcel designated Land Extensive Agriculture or Diverse Agriculture shall be agricultural production. Residential uses in these areas shall recognize that the primary use of the land in agriculture may create slower traffic and agricultural nuisance situations, such as flies, noise, odors, and spraying of chemicals. **(Existing LCP Revised – Appendix E, AR-4a)**

Policy C-AR-3b: Protect agricultural operations by establishing a buffer between an agricultural use on land in the Agriculture land use category and residential development, except for caretaker, agricultural employee, and farm related units. The buffer shall occur on the parcel to be occupied by the residential development and may include one or more of the following: a physical separation of 100 to 200 feet, landscaped berm, topographic feature, substantial tree stand, water course, or similar feature. The type, design, and location of the buffer shall be based on the type, size, and characteristics of the adjacent agricultural operations so as to protect the maximum feasible amount of agricultural land. **(Existing LCP Revised)**

Policy C-AR-3c: Apply the provisions of the Right to Farm Ordinance (**Appendix C**) to all lands designated Land Extensive Agriculture and Diverse Agriculture. **(Existing LCP Revised)**

3.3 Location and Intensity of Agriculture Related Support Uses

GOAL C-AR-4: **Facilitate agricultural production by allowing related agricultural support uses (agricultural processing and agricultural services), to be conveniently and accessibly located in agricultural production areas when related to the primary agricultural production in the area.**

Objective C-AR-4.1: Facilitate local agricultural production by allowing with a use permit agricultural processing on agricultural lands where appropriate and compatible and consistent with California Coastal Act priorities.

Objective C-AR-4.2: Facilitate local agricultural production by allowing with a use permit on agricultural lands limited agricultural support uses which support local agricultural activities and are not detrimental to the long-term agricultural uses in the area.

Objective C-AR-4.3: Ensure that agricultural support uses allowed on agricultural lands are only allowed when demonstrated to be necessary for, and proportional to, agricultural production on-site.

The following policies, in addition to those in the Land Use Element, shall be used to achieve these objectives:

Policy C-AR-4a: Agricultural Resources Element **Table C-AR-3** establishes the agricultural uses allowed and planning permits required on agricultural lands in the Coastal Zone. **(New)**

Table C-AR-3: Agricultural Uses and Support Uses Allowed and Permit Thresholds

Use	Planning Permits Required	Permit Type
Allowed		
Grazing, Row Crops	Principally Permitted "By-Right"	none required
Vineyard, Orchard	Principally Permitted Coastal Permit ¹	Discretionary
Agricultural Processing (e.g., creamery, winery)	Use Permit Coastal Permit	Discretionary ²
Agricultural Services (e.g., farm equipment, veterinarian)	Use Permit Coastal Permit	Discretionary ²
Small-Scale Farm Retail Sales	Coastal Permit	Discretionary
Farm Stand	Principally Permitted "By-Right"	none required
Non Agricultural Uses		
Tasting Rooms	Discretionary, Only allowed in commercial zones	
Other Visitor-Serving Use (e.g., agricultural promotional event, restaurant)	Discretionary, Only allowed in commercial zones	
Notes:		
¹ VESCO permit also required from Sonoma County Agricultural Commissioner		
² May be appealable to California Coastal Commission if within their jurisdiction or appealable area per map on file at Permit Sonoma		

Policy C-AR-4b: Storage facilities shall be permitted for agricultural products grown, prepared, or processed on-site. Facilities shall be sized to accommodate but not exceed the agricultural operation, and shall be designed to be compatible with and not adversely impact surrounding land uses. **(Existing LCP Revised – Appendix E, AR-5f)**

Policy C-AR-4c: Only allow agricultural support uses, including agricultural processing and agricultural services uses that clearly support local agricultural production consistent with the specific requirements of each of the two agricultural land use categories. Ensure that such uses are clearly subordinate to on-site agricultural production and do not adversely affect agricultural production in the area. The following criteria shall be used for approval of agricultural processing or service uses:

- (1) The use is subordinate to on-site agricultural production based on the following considerations:
 - (a) The portion of the site devoted to the agricultural support use in relation to agricultural production.
 - (b) The size and number of structures needed for the agricultural support use in relation to agricultural production.
 - (c) The relative number of employees devoted to the agricultural support use in comparison to that needed for agricultural production.
 - (d) The types of agricultural production on the site in the past and present.
 - (e) The potential for the agricultural support use to be converted to non-agricultural uses due to its location and access.
- (2) The use will not require the extension of sewer or water.
- (3) The use would not convert agricultural lands inconsistent with Coastal Act Sections 30241 and 30242.
- (4) The use does not substantially detract from agricultural production on-site.
- (5) The use does not create a concentration of commercial uses in the immediate area.
- (6) The use is compatible with and does not adversely impact surrounding residential neighborhoods. **(Existing LCP Revised – Appendix E, AR-5d)**

Policy C-AR-4d: Even if related to surrounding agricultural activities local concentrations of agricultural services or agricultural processing (e.g., cheese, wineries), that are detrimental to the primary use of the land for the agricultural production, rural character, traffic, or water resources shall be avoided. **(Existing LCP Revised – Appendix E, AR-5e)**

3.4 Farm Related Housing

GOAL C-AR-5: **Support efficient management of local agricultural production activities by the development of adequate amounts of housing for farmworkers and family members engaged in the farming operation in agricultural areas.**

Objective C-AR-5.1: Encourage farm operators to provide suitable on-site housing for seasonal and agricultural farmworkers and family members engaged in farming operations to maintain agricultural production activities, in accordance with allowable residential density.

The following policies, in addition to those in the Land Use Element and Open Space Element shall be used to achieve this objective:

Policy C-AR-5a: Allow up to four residential units per agricultural parcel, consistent with the maximum residential density, for the purpose of housing family members and agricultural employees. All housing units should be grouped together on the parcel to maximize environmental protections and promote efficient agricultural operations. **(Existing LCP Revised)**

Policy C-AR-5b: Housing for seasonal workers as needed to serve the agricultural industries of the area shall be permitted if it does not necessitate the extension of sewer or water service inconsistent with the Public Facilities and Services Element. This housing may be constructed to the minimum standards acceptable under State law and as allowed under the Public Facilities and Services Element. **(GP2020)**

3.5 Support Agriculture's Economic Viability

GOAL C-AR-6: **Support agriculture as the long term viable economic use of land without selling or encumbering the farmland as collateral.**

Objective C-AR-6.1: Continue participation in the Land Conservation Act and Farmland Security Zone programs.

Objective C-AR-6.2: Formulate programs and evaluate alternative funding sources which offer financial incentives to the farm owner to reduce reliance on subdivision and sale of land to raise operating capital.

The following policies, in addition to those of the Water Resources Element, shall be used to achieve these objectives:

Policy C-AR-6a: Subdivision of any Land Conservation Act contracted lands shall not result in any new parcel less than 10 acres for Prime lands (formerly referred to as Type 1 preserves) or 40 acres for Non-Prime lands (formerly referred to as Type 2 preserves), or the established minimum lot size, whichever is more restrictive. Each proposed new parcel must separately meet the criteria for a new contract. **(Existing LCP Revised – Appendix E, AR-8c)**

Policy C-AR-6b: Encourage and support farms and ranches, both large and small, that are seeking to implement programs that increase the sustainability of resources, conserve energy, and protect water and soil in order to bolster the local food economy, increase the viability of diverse family farms and improve the opportunities for farmworkers. **(GP2020)**

3.6 Aquaculture

Goal C-AR-7: **Provide for the raising, harvesting and production of fish in the same manner as the harvesting and production of agricultural products.**

Objective C-AR-7.1: Allow aquaculture and its related facilities and activities in agricultural areas.

Objective C-AR-7.2: Provide opportunities for development of support facilities for the fishing industry on appropriate lands.

Objective C-AR-7.3: Promote products of the fishing industry in the same manner as agricultural products.

The following policies, in addition to those in the Open Space and Resource Conservation Element and Public Access Element, shall be used to achieve these objectives:

Policy C-AR-7a: Outdoor aquaculture shall be permitted in the same manner as other agricultural production uses. **(GP2020)**

Policy C-AR-7b: Support facilities for the fishing industry, including but not limited to equipment storage, processing facilities, and canneries may be allowed on lands designated for agricultural land use adjacent to the Urban Service Boundary of Bodega Bay. If the facility or use requires urban services, extension of such services on lands adjacent to the Urban Service Boundary may only be permitted for that purpose. Ensure that such uses are clearly subordinate to on-site aquaculture production and do not adversely affect agricultural production in the area. The following criteria shall be used for approval of aquaculture processing or service uses:

- (1) The use is subordinate to on-site aquaculture and agriculture production based on the following considerations:
 - (a) The portion of the site devoted to the support use in relation to production.
 - (b) The size and number of structures needed for the support use in relation to production.
 - (c) The relative number of employees devoted to the support use in comparison to that needed for production.
 - (d) The uses on the site in the past and present.
 - (e) The potential for the support use to be converted to non-agricultural uses due to its location and access.
- (2) The use would not convert agricultural lands inconsistent with Coastal Act Sections 30241 and 30242.

- (3) The use does not substantially detract from agricultural production on-site.
- (4) The use does not create a concentration of commercial uses in the immediate area.
- (5) The use is compatible with and does not adversely impact surrounding residential neighborhoods. **(New)**

4. IMPLEMENTATION PROGRAMS

4.1 Agricultural Resource Implementation Programs

Program C-AR-1: Consider updating the agricultural zoning districts to reflect the policies of the Agricultural Resources Element.

4.2 Other Initiatives

Other Initiative C-AR-1: Encourage the Sonoma County Agricultural Preservation and Open Space District and other agencies to sponsor a variety of ongoing educational programs that assist the farmer in financial planning and to provide technical assistance where appropriate. **(GP2020)**

Other Initiative C-AR-2: Work with public agencies and non-profit organizations to acquire development rights, easements, fee title or other interests in land in order to protect the resource values of agricultural lands. **(New)**

Other Initiative C-AR-3: Work with the State Department of Parks and Recreation to take the following actions regarding managing agricultural land in State Park Units:

- (1) Prepare a long-term plan for managing grazing lands and use the plan as a basis for grazing leases;
- (2) Retain in agricultural production land not needed for public use that is compatible with and protective of the resource values and recreation uses;
- (3) Grant long-term grazing leases which are protective of sensitive habitats and include incentives to improve range quality; and
- (4) Monitor grazing and improve range management practices in cooperation with ranchers and the Natural Resource Conservation Service. **(Existing LCP Revised)**

Other Initiative C-AR-4: Work with State and County park and open space acquisition and management entities to avoid conversion of agricultural land to incompatible uses, and to address impacts to and protection of agricultural lands. **(New)**

Other Initiative C-AR-5: Work with local Resource Conservation Districts and agricultural associations to encourage and promote sustainable and organic agriculture that uses management practices which conserve energy and protect water and soil, uses organic pesticides, and produces locally grown and processed agricultural products, to help ensure the long-term use and conservation of coastal resources.
(Existing LCP Revised)

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PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

OPEN SPACE AND RESOURCE CONSERVATION ELEMENT September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

OPEN SPACE AND RESOURCE CONSERVATION ELEMENT

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OPEN SPACE AND RESOURCE CONSERVATION ELEMENT

1. INTRODUCTION

1.1 Purpose

State law recognizes that open space land is a limited and valuable resource which must be conserved wherever possible. The Open Space and Resource Conservation (OSRC) Element of the Local Coastal Plan must address open space for the preservation of natural resources; for the managed production of resources; for outdoor recreation; for public health and safety; and for the preservation of archaeological, historical, and cultural resources.

The purpose of the Open Space and Resource Conservation Element is to preserve the natural and scenic resources which contribute to the general welfare and quality of life for the residents of the Sonoma County coast and to the maintenance of its tourism industry. This Element provides the guidelines for making necessary consistency findings and includes an implementation program, as required by law.

1.2 Relationship to Other Elements

The Open Space and Resource Conservation Element is coordinated with the Public Safety, Public Facilities and Services, Agricultural Resources, Water Resources, Land Use, and Public Access Elements. Following are the relationships among the Local Coastal Plan Elements:

Open Space for Preservation of Natural Resources

- (1) The Open Space and Resource Conservation Element includes policies that address preservation of scenic resources and biotic habitats, including riparian corridors; and protection of estuarine and marine environments during dredging operations. It also addresses air quality, energy, mineral, timber, and soil resources.
- (2) The Water Resources Element includes policies that address preservation of both surface and groundwater resources, including water supply and water quality.

Open Space for Managed Production of Resources

- (1) The Land Use Element establishes land use categories for agriculture and timber resources production.

- (2) The Open Space and Resource Conservation Element includes policies that address management of mineral, timber, and energy resource production; and support facilities for the commercial fishing industry.
- (3) The Agricultural Resources Element includes policies that address agricultural production.
- (4) The Water Resources Element includes policies that address management of water resources.

Open Space for Outdoor Recreation

- (1) The Public Access Element and Plan identify areas where recreational facilities are needed; and include policies that address public access to the Coast, needed improvements to parks and trails, bikeways, parking for recreational facilities, and recreational boating.
- (2) The Open Space and Resource Conservation Element includes policies that address scenic resources.
- (3) The Public Facilities and Services Element includes policies that address park and recreation services.

Open Space for Public Health and Safety

- (1) The Land Use Element includes policies that limit development in hazardous areas, such as flood zones and areas with fire and geologic hazards.
- (2) The Public Safety Element includes policies that protect the community from geologic hazards (including seismic hazards and coastal erosion), flood hazards, fire hazards, and hazardous materials.
- (3) The Open Space and Resource Conservation Element includes policies that address air quality and soils and slope stability.
- (4) The Water Resources Element includes policies that address water quality and quantity.

Open Space for the Protection of Archaeological and Historical Resources

- (1) The Open Space and Resource Conservation Element includes policies that address preservation and protection of archaeological, historical, and tribal cultural resources. The policies address protection and preservation of significant archaeological, historical, and tribal cultural sites that represent the ethnic, cultural, and economic groups that have lived and worked in Sonoma County, including Native American populations. It also addresses the confidentiality of records pertaining to such resources and provides for appropriate treatment of Native American and other human remains discovered during project site development.

1.3 Scope and Organization

The OSRC Element contains a policy framework for the preservation of open space and conservation of natural resources and an Open Space Map designating lands subject to various policies.

The OSRC Element has nine classifications of open space and resource conservation:

- Scenic and Visual Resources
- Biotic Resources
- Commercial Fishing Operations
- Soil Resources
- Timber Resources
- Mineral Resources
- Energy Resources
- Air Resources
- Archaeological and Historical Resources

The OSRC Element establishes goals, objectives, and policies to protect and sustainably manage Sonoma County's natural and cultural coastal resources. Programs needed to implement proposed policies are also identified. In addition, the Element identifies ongoing or potential future County initiatives, referred to as Other Initiatives, which support sound resource management and planning, and promote inter-agency and community collaboration.

2. SCENIC AND VISUAL RESOURCES POLICY

The Sonoma County coast is beautiful, rugged, and varied. A typical coastal cross-section west to east would show ocean with a rocky intertidal zone, steep vertical bluff, coastal terrace, hillside, and ridge. Major landscape features include the Gualala and Russian Rivers, numerous creeks and gullies as associated sensitive habitats, and coastal villages and independent subdivisions.

The beauty and accessibility of the Coast have made it a heavily visited tourist and recreational area. Sightseeing and outdoor recreation are primary activities drawing many visitors to the coast. The goal of the Scenic and Visual Resources section is to prevent the blocking or degradation of scenic views and to assure that development is compatible with the existing natural and man-made landscapes.

2.1 Additional Design Guidelines and Standards

Design guidelines and standards specific to the communities of The Sea Ranch, Timber Cove, Bodega Harbour, Taylor Tract, and Sereno del Mar have been adopted. Many community design guidelines are enforced through local Design Review Committees, however, in most cases changes to the local design standards must be approved by the

Sonoma County Design Review Committee and may require amendment to the Local Coastal Program. These community-specific Design Guidelines are to be used in addition to the Coastal Design Guidelines. In the case of conflict, the most restrictive standards shall apply.

2.2 Scenic Landscape Units and Vista Points

The scenic and visual resources component of the Open Space and Resource Conservation Element includes three categories of Scenic Resource Areas: 1) Scenic Landscape Units, including Major Views; 2) Vista Points; and 3) Scenic Highway Corridors.

2.2.1 Scenic Landscape Units

The Sonoma County coast is a scenic resource vital to the County. Coastal bluffs, Bodega Bay, and other landscapes on the Coast are of special importance. Preservation of these scenic resources is important to the quality of life of Coast residents and the tourists and agricultural economy. Maintaining the openness of these areas provides important visual relief from developed areas. These landscapes have little capacity to absorb development without significant visual impact.

The single Scenic Landscape Unit designated on the County coast occupies portions of all Coast SubAreas (**Figures C-OSRC-1a-k**). The Scenic Landscape Unit includes three basic types of landscapes - the flat terraces south of the Russian River, the more hilly terraces from Fort Ross northward, and the coastal bluffs area between.

2.2.2 Major Views

Major Views are long views of unique visual interest, focus, or variety. Major Views are abundant on the Coast and include islands, rock headlands, coves, lagoons, estuaries, rivers, expansive beaches, white water, coastal hills, and historic settings. Multiple Major Views are located in each of the 10 Coast SubAreas (# of Major Views per SubArea) – The Sea Ranch North (14), The Sea Ranch South (20), Stewarts Point (15), Salt Point/Horseshoe Cove (16), Timber Cove/Fort Ross (25), High Cliffs/Muniz/Jenner (30), Duncan’s Mills (6), Pacific View/Willow Creek (25), State Beach/Bodega Bay (28), and Valley Ford (13).

2.2.3 Vista Points

Vista Points are roadside areas suitable for parking which have exceptional views. The viewshed from a Vista Point is more sensitive than the viewshed from a Major View since the viewer is stopped and can take full advantage of the visual experience. Designated

Vista Points should be developed with safe ingress and egress, parking areas, interpretive signs, and restrooms where appropriate. Vista Points are located three SubAreas of the Coast (# of Vista Points per SubArea) - High Cliffs/Muniz/Jenner (2), Pacific View/Willow Creek (2), and State Beach/Bodega Bay (1) (**Figures C-OSRC-1f, C-OSRC-1h, and C-OSRC-1i**, respectively).

GOAL C-OSRC-1: **Retain the largely open, scenic character of Scenic Landscape Units and views from Vista Points.**

Objective C-OSRC-1.1: Retain a rural, scenic character in Scenic Landscape Units with very low intensities of development.

Objective C-OSRC-1.2: Protect the ridges and crests of hills in Scenic Landscape Units and views from Vista Points from the silhouetting of structures against the skyline.

Objective C-OSRC-1.3: Protect hills and ridges in Scenic Landscape Units and views from Vista Points from visible cuts, fills, and vegetation removal.

The following policies, in addition to those of the Land Use Element, shall be used to achieve these objectives:

Policy C-OSRC-1a: Continue to apply the Scenic Resources Combining Zoning District to all lands located within Scenic Landscape Units and views from Vista Points. **(GP2020)**

Policy C-OSRC-1b: Development which will significantly degrade the scenic qualities of Scenic Landscape Units and views and from Vista Points shall be prohibited. **(Existing LCP Revised)**

Policy C-OSRC-1c: Development (including buildings, structures, fences, paved areas, signs, and landscaping) shall be prohibited from obstructing views of the coastline from coastal roads, bikeways, Vista Points, recreation areas, and beaches. **(Existing LCP Revised)**

Policy C-OSRC-1d: Amendments to increase residential density in Scenic Landscape Units in excess of one unit per ten acres shall be avoided. The Local Coastal Plan Land Use Map may designate a lower density or larger minimum lot size. **(GP2020)**

Policy C-OSRC-1e: Commercial or industrial uses in Scenic Landscape Units other than those which are permitted by the agricultural or resource land use categories shall be avoided. **(GP2020)**

Policy C-OSRC-1f: Development within Scenic Landscape Units, Major Views, and views from Vista Points shall be required to meet the Scenic View Guidelines in addition

to all other applicable design guidelines. In the case of conflict, the most restrictive design standards shall apply. **(GP2020 / Existing LCP Revised)**

Policy C-OSRC-1g: The following standards shall be used in addition to those of **Policy C-OSRC-1f** for new subdivisions within Scenic Landscape Units, other Major Views, and views from Vista Points:

- (1) Building envelopes shall be established for new residential structures so that they are located in the least visually sensitive areas, and height limitations shall be established if necessary to further mitigate visual impacts.
- (2) Lots shall be clustered to reduce visual impacts where consistent with the Land Use Element.
- (3) Building sites and roads are to be constructed to preserve significant tree stands and significant oak trees.
- (4) Driveways and access roads shall be hidden from view from public roads and use areas where practical. **(GP2020 / Existing LCP Revised)**

2.3 Scenic Corridors

Many residents of Sonoma County highly value the beauty of the Sonoma County coast's many landscapes as viewed from scenic roadways. Motorists can travel from rural communities into forest or scrub covered hills and ridges, rolling dairy lands, scenic inland valleys, wetlands rich in wildlife, scrub and grass covered terraces, breath-taking coastal bluffs, dunes, and beaches.

Preserving these landscapes is important to preserving the character of the coast. The primary impression of any area on the Coast comes from what is seen while driving, cycling, or hiking along a roadway. One of the most effective methods of protecting visual resources is to protect scenic corridors along a system of scenic roads.

Designated Scenic Corridors on the Sonoma Coast are State Highway 1, Stewarts Point-Skaggs Springs Road, State Highway 116, Coleman Valley Road, Petaluma-Valley Ford Road, Bodega Highway, Fort Ross Road, Meyers Grade/Seaview Road, Bay Hill Road, and a paved portion of Willow Creek Road.

Scenic View Easements exist along Highway 1 at The Sea Ranch and are different from the designated Scenic Corridors. A Scenic View Easement is an easement at a specific location west of the highway established for the purpose of allowing ongoing management and removal of trees in order to restore and preserve scenic views from State Highway 1 (**Appendix D-1**). The Scenic Corridor is a band along State Highway 1, and other designated roadways in which new structures are subject to a setback of

30 percent of the depth of the lot to a maximum of 200 feet from the centerline of the highway.

GOAL C-OSRC-2: Preserve roadside landscapes which have a high visual quality.

Objective C-OSRC-2.1: Provide visual links to major recreation areas, give access to historic areas, or serve as scenic entranceways to communities.

Objective C-OSRC-2.2: Ensure future land uses, development, and roadway construction are compatible with preserving scenic values along designated Scenic Corridors.

The following policies shall be used to achieve these objectives:

Policy C-OSRC-2a: Continue to apply the Scenic Resources Combining Zoning District to those portions of properties within Scenic Corridor setbacks. **(GP2020 Revised)**

Policy C-OSRC-2b: Continue to protect the unique scenic qualities of Highway 116 as outlined in the September 1988 *116 Scenic Highway Corridor Study*. **(GP2020)**

Policy C-OSRC-2c: Outside of rural communities and urban service areas, the minimum setback of a new structure from a Scenic Corridor shall be 30 percent of the depth of the lot to a maximum of 200 feet from the centerline of the road. **(Existing LCP Revised)**

Policy C-OSRC-2d: For development on parcels located both within a Scenic Landscape Unit and adjacent to a Scenic Corridor, the more restrictive siting and setback policies shall be applied to preserve visual quality. **(GP2020)**

Policy C-OSRC-2e: Highway-oriented billboards or offsite signs along Scenic Corridors shall be prohibited. **(GP2020 Revised)**

Policy C-OSRC-2f: Public works projects shall be designed to minimize damage and removal of trees along Scenic Corridors. Where trees must be removed along highways, replanting programs shall be designed so as to accommodate ultimate planned highway improvements. Replanting and revegetation shall be required following grading and road cuts. **(GP2020)**

2.4 Outdoor Lighting

Night time views of both the landscape and sky can be significantly degraded by excessive and unnecessary levels of light which increase sky glow around urban areas, make the man-made environment prominent, and result in visual clutter at night. Appropriate light levels for varying uses should be balanced with a desire to maintain

Sonoma County's rural character and preserve views of the night time skies for residents and visitors.

A related issue is the effect of artificial night lighting on biological resources. Natural patterns of darkness and light are essential to the functioning of ecosystems. Artificially lighting the nighttime sky may have serious negative consequences for the ecosystem, termed ecological light pollution. Ecological light pollution includes direct glare, chronic increases in illumination, and temporary, unexpected fluctuations in lighting. Sources of ecological light pollution include sky glow, lighted structures (e.g., office buildings, communication towers, bridges), street lights, security lights, vehicle lights, fishing boats, flares on offshore hydrocarbon platforms, and lights on undersea research vessels.

Artificial night lighting affects the natural behavior of many flora and fauna species. It can disturb development; feeding, mating, resting, migration, and other activity patterns; and hormone-regulated processes, such as internal clock mechanism.

Illuminance, the amount of light incident per unit area, is the most commonly used measurement of ecological light pollution. It is expressed in lux, the intensity of light per unit area of the source. How bright these sources appear to organisms depends on ambient conditions; in dark conditions a dim light appears very bright, whereas it could be practically invisible in daylight.

GOAL C-OSRC-3: **Preserve and maintain views of the night time skies and visual character of urban, rural, and natural areas, while allowing for night time lighting levels appropriate to the use and location.**

Objective C-OSRC-3.1: Maintain night time lighting levels at the minimum necessary to provide for security and safety of the use and users to preserve night time skies and the night time character of urban, rural, and natural areas.

Objective C-OSRC-3.2: Ensure that night time lighting for new development is designed to avoid light spillage offsite or upward into the sky.

The following policies shall be used to achieve these objectives:

Policy C-OSRC-3a: All new development projects, County projects, and signage shall be required to use light fixtures which shield the light source so that light is cast downward, and that are no more than the minimum height and power necessary to adequately light the proposed use. **(GP2020)**

Policy C-OSRC-3b: Continuous all night exterior lighting in rural areas shall be prohibited, unless it is demonstrated to the decision-making body that such lighting is necessary for security or operational purposes, or that it is necessary for agricultural production or processing on a seasonal basis. Where lighting is necessary for the above purposes, glare onto adjacent properties and into the night sky shall be minimized. **(GP2020)**

Policy C-OSRC-3c: Light levels that are in excess of lighting manufacturers' standards for specific uses and the California Outdoor Lighting Standards in Title 24 of the California Code of Regulations shall be prohibited. **(GP2020)**

Policy C-OSRC-3d: In evaluating proposed development, the potential impact of any proposed artificial night lighting on the coastal ecosystem should be considered using the best available science. **(New)**

Policy C-OSRC-3e: All exterior lighting shall be Dark Sky Compliant. Lighting shall be fully shielded, directed downward, low mounted, and use bulbs that do not exceed 700 lumens and color temperature less than 3000 Kelvin. Light trespass shall not exceed one lux at the property line when all exterior lighting is operated. Night lighting that would increase existing ambient light levels in Environmentally Sensitive Habitat Areas (ESHAs) shall be prohibited. Light fixtures shall not be located at the periphery of the property, shall not wash out structures or any portions of the project site, and shall not be directed toward other properties. **(New)**

2.5 Community Character and Design

Sonoma County has adopted a basic framework of directing the majority of coastal growth into Urban Service Areas where public sewer and water are available, and where there is an existing pattern of urban-level development. This pattern of compact development and community-centered growth preserves the open space, agriculture, and natural resources that make Sonoma County unique and contribute to its valued quality of life and economic vitality. New development should enhance and retain the unique character of unincorporated communities. Successfully integrating community amenities such as attractive streets, safe bike and pedestrian access, attractive and long-lasting buildings, inviting public spaces, and important natural and cultural resources will make developed spaces more livable.

The Sonoma County coast is well known for its agrarian and small town atmosphere and its diverse and scenic natural resources, particularly its majestic coastline. In some cases, manmade structural features which have special cultural, historical, architectural, and aesthetic qualities have become as iconic as the natural features.

Regulating the design of certain types of new development in agricultural, rural, and resource areas will help to preserve the very qualities which attract tourism and enhance economic vitality. The character of the Sonoma Coast is diverse. As a result, developing design guidelines for the Coast must be done in a way that recognizes local character. Community design guidelines which avoid increased urban development in rural areas and promote integrating attractive new development with the surrounding landscape, will benefit not only property owners and developers but all who live in and visit the coast.

In the Coastal Zone development is concentrated in Urban Service Areas and Rural Communities, as the Coastal Act mandates that new development be located in close proximity to developed areas with public facilities and services. To delineate the areas appropriate for development in the Coastal Zone, Urban Service Areas have been established and include The Sea Ranch on the North Coast and Bodega Bay on the South Coast. Between these Urban Service Areas lie Rural Communities, areas that were previously subdivided or developed with public water and private septic systems and include Duncans Mills, Jenner, Sereno del Mar, Carmet, Salmon Creek, Timber Cove, and Valley Ford. These large lot subdivisions, have a strong impact on community aesthetics. Maintaining and preserving these communities adds to the visual character of the coast.

The major community design issues on the Coast are preservation of coastal views and the visual quality and compatibility of new development with the natural landscape (comprised of landform and vegetation) and existing development.

The Sea Ranch, Bodega Bay, and Bodega and Duncans Mills Historic Districts have adopted design guidelines and development must be consistent with these standards. In all other areas construction materials, colors, and architectural features should blend with the natural landscape features of the site so that structures and nature complement one another and development has a minimal aesthetic impact. In the Bodega and Duncans Mills Historic Districts, Stewarts Point, and Valley Ford, integrating new buildings with the existing character of the town is the main concern.

An issue closely related to integrating structural design with the physical conditions of a site is that of scale, the relationship of the size of the structure to its surrounding features, both natural and man-made. Homes on the Coast constructed out of scale with their surroundings may be too massive for their lot size, block light and air for smaller neighboring homes, or degrade the character and harmony of the community.

There are few unifying features in many of the subdivisions on the Sonoma Coast. In older communities, traditional styles of early coastal buildings are encouraged. In newer communities, roof lines and building exteriors should be compatible with surrounding buildings.

2.5.1 Urban Service Areas

The Sea Ranch. For over 100 years sheep ranches occupied the ten miles of coastline now occupied by The Sea Ranch. Oceanic Properties bought the 5200 acre Del Mar Ranch in 1963, intending to create a low density residential community where development would blend harmoniously with the natural environment. These goals are embodied in The Sea Ranch Codes, Covenants, and Restrictions (CC&Rs), Design Guidelines for The Sea Ranch and *The Sea Ranch Design Manual and Rules*, and have been applied and enforced by The Sea Ranch Design Committee and Department of Compliance and Environmental Management. The overall effect is of subdued, modern structures in some locations well integrated with the existing landforms and vegetation.

Bodega Bay. The small scale of its bay oriented development, historical significance, and importance to recreation and the fishing industry qualify Bodega Bay as a special coastal community worthy of protection. To maintain and protect the fishing village character of Bodega Bay and to provide needed affordable housing, new residential development adjacent to the original town is proposed to be similar in scale and design to that in the core area of Bodega Bay.

Most homes in the core area of Bodega Bay are similar in scale, design, and construction. This area including the Taylor Tract, is defined by modest single-story structures with pitched roofs, vertical windows, and vertical front elevations painted brown, beige, green, and white with contrasting trim. Small informal yards are devoted to landscaping, gardens, and parking areas. Many yards are bordered by traditional picket fences.

Commercial development in and near Bodega Bay encompasses a wide variety of styles and colors - mainly single-story wood structures with gable roofs and no other unifying design features. With the absence of a predominant architectural style for commercial structures, it would be appropriate for new commercial construction to reflect the nautical character of the harbor with wooden buildings of simple design.

Bodega Harbour Subdivision. Bodega Harbour Subdivision, located just south of Bodega Bay, began as a second home development in 1969. The subdivision has a design review procedure that is evident in the existing development. The residences relate to one another, with few homes dominating. Structures are large one and one-half to two-story structures with unpainted wood exteriors and various modern architectural designs.

The Bodega Harbour Design Review Guidelines, in the CC&Rs for the Subdivision have been applied and enforced by the Bodega Harbor Homeowners Association Design Review Committee.

2.5.2 Rural Communities

Timber Cove. Timber Cove is a low density subdivision established in the early and middle 1960s that remains partially undeveloped. Most of the subdivision is heavily forested. Few lots are visible east of State Highway 1. The most visible lots are along Ninive Drive west of State Highway 1 and in meadow areas. The homes have subdued exterior colors, indigenous landscaping, and are generally well-screened behind trees and landforms. In two locations high fences adjacent to State Highway 1 block views to the ocean.

The Timber Cove Architectural Guidelines, are in the CC&Rs for the subdivision and applied by the Timber Cove Homes Association.

Jenner. Jenner was originally a second home development platted in 1914. The town has grown slowly and new development is constrained by restrictions on water system connections and the limited area for septic systems on the small lots. As the community is highly visible from State Highway 1, it is important that new development be compatible in design and scale with existing development. Most homes are of one and two-story conventional construction with large windows overlooking the river and ocean, some with terraced gardens. Roofs are pitched and exteriors are painted wood except at the north end of town where some newer homes are unpainted with flat roofs. Roads are narrow and steep with no curbs, gutters, or sidewalks. Jenner does not have community specific design guidelines.

Duncans Mills. Duncans Mills, a County Historic District, was a railroad depot and commercial center established in the 1880s. The western false front commercial buildings have been preserved, and several new buildings of similar design have been constructed to serve the community and visitors. Commercial uses have been developed by private interests that continue to build in the old west theme. Duncans Mills does not have community specific design guidelines.

Sereno Del Mar. Sereno Del Mar, platted between 1970 and 1972, is a residential subdivision north of Bodega Bay. More than one-half of the 173 lots have been developed. Homes are large on large lots and are generally one to one and one-half stories high due to a 16 foot height limitation. The Sereno del Mar design guidelines are included in the CC&Rs for the subdivision and are applied by the Sereno del Mar Design Review Committee.

Carmet. Carmet is a residential subdivision of 60 lots developed in the late 1940s. Density is approximately four units per acre with homes set squarely on the gently sloping lots east of State Highway 1. Homes are generally one-story with flat gravel

roofs and painted wood exteriors. Landscaping is suburban with lawns, flowers, and a few trees. Most of the remaining lots are unbuildable due to septic system constraints on the small lots. Any new development should be compatible with existing homes as there is a distinct design unity to the subdivision. Carmet does not have community specific design guidelines.

Salmon Creek. Salmon Creek is a compact subdivision developed in the 1920s and 1930s. Although vacation home use still predominates, many of the dwellings house full time occupants. Homes generally have painted wood exteriors and gable roofs. The private roads are very narrow and poorly surfaced. Landscaping is minimal since yards are small and used primarily for parking. Community boundaries are well defined by Salmon Creek, State Highway 1, and State Parks property. Sewer and water constraints limit new development. The type and scale of new development should be compatible with the existing character of the community as well as to the area's very sensitive natural features. Salmon Creek does not have community specific design guidelines.

Valley Ford. Valley Ford received its name from the old Indian and Spanish ford across the Estero Americano. This small, historic community has evolved over the years and has no distinct architectural theme. Styles include Greek Revival, Queen Anne, Western Falsefront, Italianate, and bungalow. Many of the existing buildings date to the 1870s and 1880s. Valley Ford does not have community specific design guidelines.

Stewarts Point. Stewarts Point was founded in 1857 at Fisherman's Bay by A.L. Fisk, who established a store and hotel. The community contains simple early Greek Revival buildings, including a store, hotel, one room school, and series of barns and out-buildings, which together illustrate a strong sense of a 19th century coastal town. Stewarts Point does not have community specific design guidelines.

Rancho del Paradiso. Located along the south side of the Russian River, Rancho del Paradiso is a development on small lots platted in the 1930s. New development is constrained by restrictions on water system connections and the limited area for septic systems on the small lots. The community is not highly visible from State Highway 1. Rancho del Paradiso does not have community specific design guidelines.

Bridgehaven Resort. Bridgehaven Resort is located on the south bank of the Russian River near the junction of State Highways 1 and 116, and is visible from Vista Points on State Highway 1. Dating from the 1930s, the resort includes summer cabins, a store and café, and a trailer park with permanent residents. The campground is no longer in use, and the trailer park is not screened from view. Although new development is severely constrained by inadequate water supply, any modifications to existing development should include design and landscaping improvements.

2.5.3 Landforms

The landforms of the Coastal Zone are classified into the following eight types: Beaches, Dunes, Bluffs, Terraces, Hillsides, Ridgelines, Wetlands, and Inland Valleys. Each landform has readily recognizable characteristics upon which recommendations for future development can be established. Beaches, Dunes, and Wetlands are addressed in more detail in Section 3, Biotic Resources.

Terraces. Coastal terraces are the broad, level areas between coastal hills and bluffs. They are generally covered with grasses and sometimes dotted with trees or divided by tree Windbreaks, comprised predominantly of cypress trees. Lines are horizontal except where trees create a vertical influence and break up the open landscape. Terraces are particularly visually sensitive.

Hillsides. Coastal hillsides are the interfaces between the coastal terraces and the ridgelines. Many of Sonoma County's hillsides begin east of State Highway 1, have few trees and shrubs, and are highly visible. Other coastal hillsides are forested, particularly on the North Coast. These forested hillsides are not as visually sensitive as are terraces and non-forested hillsides. Hillsides are especially sensitive to grading activities that do not conform to natural land contours.

Ridgelines. Ridgelines are the most visually sensitive of the landforms on the Sonoma County coast. Ridgelines are often seen from great distances. The contrast between the land and the sky makes structural intrusions very obvious. The high locations of ridgelines cause any alterations to be seen from a wide area and may affect many viewsheds. A primary example of the sensitivity of ridgelines is the Muniz Ranch subdivision east of Russian Gulch. While driving up State Highway 1 from Russian Gulch to the high bluffs, it is apparent that the spectacular views to the east have been significantly degraded by the ridgetop development.

Inland Valleys. The two inland valleys on the Sonoma County coast are at Duncans Mills and Valley Ford. They are characterized by historic villages surrounded by agricultural land.

2.5.4 Vegetation

A substantial amount of change to vegetation has occurred on the Sonoma County coast over the last couple hundred years. Logging in particular has eliminated forest land close to the coastline. Prairie grassland is the characteristic landscape along State Highway 1. Other vegetation changes include the planting of windbreaks, comprised predominantly of cypress trees; and the planting of pine trees between State Highway 1

and the coastline. Landscape planting can add complexity to the view and screen unnatural elements. However, the planting of non-native species can detract from the natural coastline landscape, and the planting of certain tree varieties west of State Highway 1 may block views to the coastline.

The Sea Ranch Association staff and volunteers have developed vegetation management programs to promote and enhance native plants while controlling and removing invasive non-native plants at The Sea Ranch. These programs include a Fuel Management Plan for fire safety consisting of pine plantation thinning for tree health, cypress hedgerow replanting and replacement for wind breaks, and sheep grazing to reduce fuel load. The Commons Landscape Committee has developed an active stewardship program where volunteers work monthly in specific areas to reduce fireweed and thistles and promote native plant regeneration. The Native Plant Committee works with homeowners to guide them in selecting and planting local native plants on their properties.

In 2015, the Commons Landscape Committee completed an extensive five-year program to review and study vegetation management in the Commons areas based on input from members and resident experts. The Committee has developed ten area management plans, each of which include information and guidelines on geology, vegetation, native plants, history, planning, and architecture and an implementation program.

2.5.5 Community Character and Design Policy

GOAL C-OSRC-4: **Preserve, retain, and enhance the unique character of each of the communities on the Sonoma County coast, while accommodating projected growth and housing needs.**

Objective C-OSRC-4.1: Establish community character as a primary criterion for review of projects in coastal communities.

Objective C-OSRC-4.2: Protect and preserve community character by Coastal Design Guidelines which call for development that preserves existing site features, contributes to community character, sites buildings and development features so they blend in with the surrounding landscape, provides connections to surrounding development, provides opportunities for community interaction and pedestrian activity, provides attractive public views, provides safe and comfortable infrastructure and streetscape improvements for bikes and pedestrians, and maintains or increases public safety.

The following policies shall be used to achieve these objectives:

Coastal Design Guidelines

Policy C-OSRC-4a: Design review shall be required for all new development outside of Urban Service Areas and Rural Community Boundaries. The Director of Permit Sonoma may waive this requirement on parcels not visible from and east of State Highway 1. **(Existing LCP Revised)**

Policy C-OSRC-4b: The Coastal Design Guidelines (**Appendix A-1**) shall be used for new development throughout the coast except where more restrictive community design guidelines have been adopted. **(Existing LCP Revised: Recommendations 4-25 on pages 173-180)**

Policy C-OSRC-4c: Existing tree windbreaks which are oriented predominantly east-west and do not block or interrupt views to the coast shall be retained; and development of new tree windbreaks which would block or interrupt views to the coast shall be discouraged. **(Existing LCP Revised)**

Design Guidelines Specific to Coastal Communities

Policy C-OSRC-4d: New development located within Bodega Bay outside of the Bodega Bay Core Area shall be consistent with the following Bodega Bay Non-Core Design Guidelines (**Appendix A-2**) in addition to the Coastal Design Guidelines (**Appendix A-1**). In the case of conflict, these community specific guidelines shall supersede the Coast Community Design Guidelines:

- (1) The exterior of structures shall be designed to reflect the nautical character of the harbor with wooden exteriors, stained or painted white or subdued earth colors.
- (2) For heavy commercial structures, textured metal in subdued colors with proper architectural detailing and landscaping shall be encouraged to add visual interest and soften building lines. **(Existing LCP Revised)**

Policy C-OSRC-4e: New development located within the Bodega Bay Core Area shall be consistent with the Bodega Bay Core Design Guidelines in addition to the Coastal Design Guidelines (**Appendix A-2**). **(Existing LCP Revised)** In the case of conflict, the Bodega Bay Core Area Design Guidelines shall supersede the Coast Community Design Guidelines.

Policy C-OSRC-4f: For The Sea Ranch, Timber Cove, Bodega Harbour, and Sereno del Mar, the applicable community-specific design guidelines in addition to the Coastal Design Guidelines (**Appendix A**) shall be used. In the case of conflict, community specific design guidelines shall supersede the Coastal Design Guidelines. **(New)**

3. BIOTIC RESOURCES POLICY

3.1 Background

The Sonoma County Coast is rich in natural resources. It supports over 15 types of upland, wetland, riparian, coastal, and open water habitats that support over 30 animal species and 48 plant species that are designated as rare, threatened, or endangered and are protected under state and federal laws and regulations. Use of the coastline by shorebirds, seabirds, and waterfowl, as well as numerous terrestrial and marine mammals, reptiles, and amphibians has been documented over the last several decades. The Biotic Resources section of the Open Space and Resource Conservation Element provides a general inventory of biological resources on the Sonoma County Coast, particularly those which are sensitive to disturbance, and identifies policies, programs, and other initiatives to guide land use and development decision-making in a manner that is consistent with the Coastal Act and community preference.

3.1.1 California Coastal Act

The 1976 California Coastal Act (Coastal Act) policies encourage the protection and continued biological productivity of marine resources, wetlands and other coastal waters, and environmentally sensitive areas.

3.1.2 Biotic Resources of the Coastal Zone

The Biotic Resources section provides a brief overview of the four main biotic resources categories represented within Sonoma County's Coastal Zone: streams and riparian corridors, wetlands, marine resources, and terrestrial habitats. In addition, this section outlines goals, objectives, and policies for the protection and management of such resources. The policy discussion is organized around resource applicability and includes policies that are: generally applicable to biotic resources throughout the coastal zone; policies applicable to Environmentally Sensitive Habitat Areas (ESHAs); policies applicable to streams and riparian areas, which are a subset of ESHAs; policies applicable to marine resources; and policies applicable to terrestrial habitats.

3.1.3 Streams and Riparian Corridors

Many rivers and creeks drain into the Pacific Ocean along the Sonoma Coast. Most of these rivers and creeks support riparian vegetation and provide important habitat and movement corridors for fish and wildlife species. Riparian areas are typically dominated by trees such as alders and willows and shrubs such as California blackberry, but contain a wide diversity of plants. Riparian areas and creeks have been altered and

managed by humans including development of roads, bridges, and other structures adjacent to and through riparian areas. This development has reduced water quality and habitat connectivity, narrowed riparian corridors, and altered stream flows. Current and past management and alteration of stream and riparian areas provides a challenge and opportunity to restore and enhance these systems to provide improved habitat for fish and wildlife. Rivers and creeks and their associated riparian corridors are generally considered to be sensitive habitats (see **Figures C-OSRC-2a** through **2k**).

Major rivers along the coast include Salmon Creek, Russian River, and Gualala River. These rivers and their tributaries, along with other cold-water creeks provide habitat to Coho salmon, Chinook salmon, and Steelhead trout. Most of the coastal rivers and creeks in Sonoma County that provide potential habitat for salmonids have been identified by the federal government as critical habitat, or habitat that is essential for the health of these species. Other native fish also depend on rivers and creeks in Sonoma County, including the tidewater goby. The tidewater goby lives in freshwater to brackish lagoons created by coastal streams; the federal government has identified portions of Salmon Creek and Estero Americano as critical habitat.

Coastal rivers and streams in Sonoma County provide habitat for several wildlife species. The California giant salamander lives in many different coastal creeks and streams, while the California freshwater shrimp is known to occur only within Salmon Creek within the coastal region of Sonoma County. Two other special-status species, the California red-legged frog and foothill yellow-legged frog, also live in coastal creeks and rivers. The California red-legged frog occurs in several streams within southern Sonoma County, including Salmon Creek. Foothill yellow-legged frog is found in rocky streams and occurs within several Sonoma County coastal creeks from Gualala River in the north to Russian Gulch in the south. Riparian corridors also provide excellent foraging and roosting habitat for bird and bat species and habitat for mammals such as bobcat, gray and red fox, and dusky-footed woodrat.

3.1.4 Wetlands

Wetlands provide wildlife habitat and protection from flooding along the Sonoma Coast. Coastal brackish marsh, coastal and valley freshwater marsh, and ponds are all sensitive wetland communities found along the Sonoma Coast. Wetlands are usually dominated by herbaceous species and generally do not contain trees. Much of the wetland habitat found along the coast occurs near Bodega Bay. Coastal Commission regulations apply more stringent criteria and methodology to survey and designate wetlands than the U.S. Army Corps of Engineers. Coastal Act regulated wetland surveys may characterize more area as wetlands on a particular parcel than would the Corps.

See California Code of Regulations, title 14, section 13577(b). Salt and brackish marsh occurs in only a few areas along the coast. These include coastal brackish lagoons and estuaries including around Penny Island and the shore at the mouth of Russian River, the mouth of Salmon creek (just north of Bodega Bay), within Bodega Harbor, and along Estero Americano (see **Figures C-OSRC-2h** through **2k**). These brackish marshes contain herbaceous plants, such as pickleweed, alkali bulrush, gumweed, and other dominant salt and brackish marsh species. At the mouth of the Gualala River, a small brackish marsh occurs that contains salt grass and salt rush (see **Figure C-OSRC-2a**). Brackish marshes provide food, cover, nesting, and roosting habitat for a variety of birds and mammals. Salt and brackish marshes have been greatly reduced from their historical extent and are important habitat to protect and restore, where feasible. Invasive plant species, existing surrounding development, and projected sea level rise provide challenges in managing and restoring salt and brackish marshes.

Freshwater marshes generally occur more inland or upriver of brackish marshes. Freshwater marshes contain mostly emergent plants such as rushes, cattails, and sedges. Freshwater marshes can provide habitat for California red-legged frog and western pond turtle as well as for many species of birds. Small seeps and ponds also occur intermittently throughout the coast and many of these form seasonally or permanently wet conditions. Some ponds or reservoirs have been man-made or have been significantly altered by humans, but still provide important habitat and water resource for wildlife. Management challenges include invasive wildlife such as the American bull frog, invasive plants species, and altered hydrologic regimes.

3.1.5 Marine Habitats

The Sonoma County coast contains a wide variety of marine habitats including offshore rocks, kelp forests, eelgrass beds, tidal flats, rocky intertidal shoreline, and sandy beaches.

Offshore of the Sonoma coast, coastal waters provide habitat to a large number of fish species, resident and migratory marine mammal species, and seabirds. While offshore waters provide foraging habitat for seabirds, offshore rocks provide roosting and nesting areas for seabird species such as Brandt's cormorant, pelagic cormorant, brown pelican, and pigeon guillemot. Kelp forests are commonly found in nearshore coastal waters north of the Russian River (see **Figures C-OSRC-2a** through **2f**). Kelp forests provide refuge from ocean predators, relief from currents, and a source of food and essential habitat for invertebrates, fish, and marine animals. Management challenges to marine habitats include overfishing, water quality, human disturbance, and climate change.

Eelgrass beds are found within the protected subtidal waters of Bodega Harbor and Estero Americano in southern Sonoma County (see **Figures C-OSRC-2i** through **2k**). These productive ecosystems not only provide food, shelter, and nursery habitat for commercially and recreationally fished species, but also reduce erosion. Bodega Harbor and Estero Americano also contain exposed tidal mudflats at low tide which provide an important invertebrate food source for shorebirds.

Rocky intertidal habitat and sandy beaches occur in narrow bands over much of the Sonoma Coast and provide great foraging grounds for shorebirds and gulls. Rocky intertidal shores are exposed during low tide and covered by seawater during high tide. The plants (likely limited to eelgrass), invertebrates, and algae that live in the rocky intertidal zone create a biologically diverse and productive community.

Stellar sea lions and other pinnipeds haul out on offshore intertidal areas that become exposed at low tides. Seals and sea lions use intertidal areas and sandy beaches, spits, and bars to haul out and rest. Harbor seals specifically use sandy beaches including the beaches at Sonoma Coast Sea Ranch, Jenner, and Bodega Bay to rest, molt, give birth, and nurse their pups. California sea lions and northern elephant seals are occasionally observed at these harbor seal haul out locations.

3.1.6 Terrestrial Habitats

A wide range of terrestrial habitats occur throughout the coastal areas of Sonoma County. Terrestrial habitats include coastal dunes, coastal prairie, coastal scrub, woodlands and forests, and urban and residential areas which contain habitats.

Coastal dunes frame many beaches along the coast and support a hardy ground cover of native shrubs, grasses and wildflowers. Many coastal dune areas have been invaded by non-native plants such as European beach grass and iceplant, which outcompete and threaten the survival of many native dune plant species. These non-native plants change the ecosystem of the coastal dunes and also threaten the nesting habitat of the western snowy plover. Coastal dunes are most commonly found in State and regional parks along the coast as these areas are protected from development.

Coastal prairie and grassland support a rich assemblage of native plants on coastal terraces and bluffs in Sonoma County. More than 90 percent of coastal prairie habitat has been lost, but it is still found sporadically along the Pacific coast of California, including Sonoma County (see **Figures C-OSRC-2e** and **2h**). Due to the drastic habitat loss and great diversity of these grasslands, coastal prairies are considered sensitive habitats. Following conversion from native bunch-grass and herb dominated communities to vegetation dominated by non-native grasses and herbs, much of

Sonoma County's historic coastal grasslands are now considered non-native annual grasslands after undergoing substantial conversion. Many of these grasslands are managed by grazing, which reduces the leaf litter caused by the larger and more aggressive non-native vegetation. Coastal prairies that are not grazed, or have been undisturbed from fire for long periods of time, often develop into coastal scrub habitat dominated by native shrubs such as bush lupine and coyote bush. Coastal prairie and scrub habitat occurs mostly on protected lands including Wright Hill Ranch, Salt Point State Park, Jenner Headlands Preserve, and Sonoma Coast State Park.

GOAL C-OSRC-5: Protect and enhance the native habitats and diverse ecological communities on the Sonoma County Coast.

Objective C-OSRC-5.1: Identify and protect native vegetation and wildlife, particularly occurrences of special status species, wetlands, sensitive native communities, and areas of essential habitat connectivity.

Objective C-OSRC-5.2: Designate Environmentally Sensitive Habitat Areas and periodically update designations using credible data sources, including peer-reviewed publications, and recent California Coastal Commission decisions.

Objective C-OSRC-5.3: Establish standards, programs, and development guidelines to protect, restore, and enhance biotic resources, including designated Environmentally Sensitive Habitat Areas, and assure that their quality is protected and maintained.

Objective C-OSRC-5.4: Where appropriate, support regulatory efforts by other agencies to protect biotic habitats.

Objective C-OSRC-5.5: Maintain and enhance connectivity between natural habitat areas.

Objective C-OSRC-5.6: Balance the need for agricultural production, development, timber and mining operations, and other land uses with the preservation of biotic resources.

3.2 Biotic Resource Protections

The following policies shall be used to achieve these objectives:

Policy C-OSRC-5a(1): Permit applications for development which could have an impact on biological resources shall be accompanied by a biological resources assessment, as required under **Policy C-OSRC-5b(3)**. Biological resources include, but are not limited to, special status plant or animal species and their habitats, coastal dunes, beaches, tidepools, wetlands, estuaries, lagoons, streams and creeks, riparian habitat, oak and other native tree woodlands, and native grasslands. **(New)**

Policy C-OSRC-5a(2): Fencing or walls shall be prohibited within riparian habitat and on bluffs, except where necessary for public safety, wildfire risk abatement, habitat protection, or restoration. Fencing or walls that do not permit the free passage of wildlife shall be prohibited. Wildlife-passable fencing should generally be no more than 40 inches tall (up to 6 feet to contain horses) and no lower than 16 inches from the ground (as low as 10 inches where sheep, goats, or predation is a concern). Wooden rail, mesh, or chain link is preferred over wire fence tops, which are less visible to and more likely to result in wildlife collisions and entanglements. Where wire cannot be avoided, the top two wires should be at least 12 inches apart, and the top and bottom wires should not be barbed. **(New)**

Policy C-OSRC-5a(3): Require buffers around sensitive biological resources to protect them from impacts of development encroachment consistent with the specific buffer provisions of this Local Coastal Program. **(New)**

Policy C-OSRC-5a(4): Proposals for exterior nighttime lighting shall minimize impacts on biotic resources through adherence to Local Coastal Plan **Policies C-OSRC-3a** through **C-OSRC-3e**. **(New)**

Policy C-OSRC-5a(5): The use of native plant species in landscaping shall be encouraged. The use of native or compatible non-native, non-invasive species for landscaping where consistent with fire safety shall be required. The use of invasive exotic plant species shall be prohibited. **(GP2020 Revised)**

Policy C-OSRC-5a(6): Project applicants shall provide evidence of permits and clearances required by state and federal agencies before Permit Sonoma issues coastal development permits, or building or grading permits. **(GP2020 Revised/New)**

Policy C-OSRC-5a(7): A Restoration and Monitoring Plan shall be required for any project involving habitat mitigation or restoration. The Restoration and Monitoring Plan shall consist of a stand-alone document that specifies performance standards, success criteria, adaptive management, and monitoring requirements as described in **Appendix E-1**. **(GP2020 Revised/New)**

3.3 Environmentally Sensitive Habitat

Environmentally Sensitive Habitat Area (ESHA) are areas in which plant or animal life or their habitats are either rare or especially valuable because of their specific nature or role in an ecosystem, and which could be easily disturbed or degraded by human activities and developments. Potential ESHAs are presented on **Figures C-OSRC-2a** through **2k**. These figures are not an exhaustive compilation of the habitat areas that may meet the ESHA definition. Any area not identified as a potential ESHA on **Figures**

C-OSRC-2a through **2k** but that meets the ESHA criteria is ESHA, and shall be accorded all the protection provided for ESHAs in the Local Coastal Program. The Local Coastal Plan's ESHA policies will generally not apply to marine habitats which are protected separately. Under the Coastal Act, ESHAs are governed by Section 30240, while marine resources are governed by Section 30230 and 30231.

Policy C-OSRC-5b(1): The following areas shall be considered ESHA, unless there is compelling site-specific evidence to the contrary:

- (1) Any habitat area that is rare or especially valuable from a local, regional, or statewide perspective.
- (2) Areas that contribute to the viability of plant or animal species designated as rare, threatened, or endangered under State or Federal law.
- (3) Areas that contribute to the viability of species designated as Fully Protected or Species of Special Concern under State law or regulations.
- (4) Areas that contribute to the viability of plant and animal species for which there is compelling evidence of rarity. **(New)**

Policy C-OSRC-5b(2): The following criteria shall be considered when determining whether an area should be designated ESHA:

- (1) The potential ESHAs presented on **Figures C-OSRC-2a** through **2k**
- (2) Federally-listed Rare, Threatened, & Endangered Species
- (3) State-listed Rare, Threatened & Endangered Species
- (4) Federal and State Proposed/Candidate Species
- (5) California Native Plant Society "1B" and "2" Listed Species
- (6) California Department of Fish and Wildlife Global and State 1 - 3 Ranked Vegetation Communities (i.e. G1, G2, G3, S1, S2, S3)
- (7) California Department of Fish and Wildlife Global and State 1 - 3 Ranked Plant and Animal Species
- (8) California Species of Special Concern
- (9) California Fully Protected Species
- (10) Habitats that Support Listed Species (i.e., those in 2 & 3)
- (11) Tree stands that support raptor nesting or monarch populations
- (12) Genetically special populations **(New)**

Policy C-OSRC-5b(3): A biological resource assessment shall be required for any project which could impact biological resources. The biological resource assessment shall be performed by a qualified biologist and shall meet criteria described in **Appendix E-2**, Biological Resource Assessment Requirements. Permit Sonoma may require additional site specific information. **(New)**

Policy C-OSRC-5b(4): ESHAs shall be protected against any significant disruption of habitat values. Uses allowed within ESHAs shall be limited to those that are dependent on and compatible with maintaining the ESHA resources, and those that are otherwise specifically provided for in **Policy C-OSRC-b(10)** and **Appendix E-3**. Proposed development in areas adjacent to ESHAs and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and must be compatible with the continuance of such habitat areas. **(New)**

Policy C-OSRC-5b(5): Establish buffers around ESHA to protect it from development impacts. ESHA buffers shall be developed in accordance with **Appendix E-3**. All buffers around ESHA shall be a minimum of 100 feet in width; a lesser width may be approved by the County as addressed in **Policy C-OSRC-5b(10)** and **Appendix E-3**. A buffer of greater than 100 feet may be required in consultation with resource agencies to protect sensitive species. For example, a 600-foot buffer might be required for heron rookeries; a 500-foot buffer for occupied raptor nests; a 300-foot buffer for any occupied burrow of a burrowing owl. Only developments consistent with **Policy C-OSRC-5b(7)** shall be allowed in ESHA buffers. **(New)**

Policy C-OSRC-5b(6): Public access-ways and trails are considered resource dependent uses. New access-ways and trails located within or adjacent to ESHA shall be sited to minimize impacts to ESHA to the maximum extent feasible. Measures, including but not limited to signage, placement of boardwalks, and limited fencing shall be implemented as necessary to protect ESHA. **(New)**

Policy C-OSRC-5b(7): In some cases, smaller buffers around (non-wetland) ESHA and other biotic resources may be appropriate, when conditions of the site as demonstrated in a site specific biological assessment, the nature of the proposed development, and appropriate mitigation, show that a smaller buffer would provide adequate protection. In such cases, the County must find that a reduced buffer is appropriate and that the development could not be feasibly constructed without a reduced buffer. In no case shall the buffer be less than 50 feet.

Policy C-OSRC-5b(8): If proposed development is a permissible use and there is no feasible alternative, including the no project alternative, that can avoid significant impacts to ESHA, then the alternative that would result in the fewest or least significant impacts shall be selected. Residual adverse impacts to ESHA shall be fully mitigated,

with priority given to on-site habitat mitigation. Off-site habitat mitigation measures shall only be approved when it is not feasible to fully mitigate impacts on-site or where off-site habitat mitigation is more protective, as documented in a biological resource assessment prepared by a qualified biologist and approved by Permit Sonoma staff. Any determination that it is infeasible to mitigate impacts onsite should be supported by written findings. Mitigation may not be used as a substitute for implementation of the project alternative that would avoid impacts to ESHA. Mitigation for impacts to ESHAs other than marine habitats shall be provided at a minimum ratio of 2:1. The more specific mitigation requirements as required by regulatory agencies or the County shall control over the more general mitigation requirements of this Local Coastal Plan. **(New)**

Policy C-OSRC-5b(9): Adjacent to ESHA, the use of compatible native, non-invasive plant species for landscaping shall be required as a condition of coastal development permit approval. The use of invasive exotic plant species shall be prohibited. No landscaping shall extend into ESHA. **(GP2020 Revised)**

Policy C-OSRC-5b(10): If the application of the policies and standards contained in this Local Coastal Plan regarding use of property designated as ESHA or ESHA buffer, including the restriction of ESHA to only resource-dependent use, would likely constitute a taking of private property without just compensation, then a use that is not consistent with the ESHA provisions of the Local Coastal Plan may be allowed on the property, provided such use is consistent with all other applicable policies of the Local Coastal Plan, the approved project is the alternative that would result in the fewest or least significant impacts, and it is the minimum amount of development necessary to avoid a taking of private property without just compensation. In such a case, mitigation for impacts on ESHA shall be required in accordance with applicable Local Coastal Plan policies. Mitigation may not be used as a substitute for implementation of a feasible project alternative that would avoid adverse impacts to ESHAs. **(New)**

Policy C-OSRC-5b(11): Land divisions, including subdivisions, lot splits, and lot line adjustments involving lots containing or within proximity to ESHA for which protective buffers are required, may be approved only if findings are made to support that the resulting parcels contain adequate land area to place all improvements (e.g., buildings, sewage disposal where applicable, and appurtenant structures and features such as detention/retention ponds and biofiltration swales) outside of areas required for watercourse or other ESHA buffer protection. **(New)**

3.4 Streams and Riparian Vegetation

Policy C-OSRC-5c(1): Along both sides of riparian corridors, as defined in this Local Coastal Plan, establish streamside conservation areas measured on each side of the channel as: a) within riparian habitat as determined by the Permit Sonoma or a

qualified resource specialist, b) 100 feet from the landward edge of riparian vegetation as defined by Permit Sonoma or a qualified resource specialist, or c) 100 feet (200 feet for the Russian River) out from the top of the bank on each side of the stream, whichever is farthest from the channel centerline. Where there is more than one bank on a side of the stream and the top-of-bank measurement approach is used, the measurement shall be from the top of the higher bank on that side. **(GP2020 Revised) (Existing LCP Revised: Recommendation 9 on page 28)**

Policy C-OSRC-5c(2): Allowable uses and development within any streamside conservation area or Riparian Corridor shall be limited to uses and methods described in Habitat Development Guidelines where it can be sited, designed, and shown that construction, operation, and maintenance of the use or development would not result in significant, long-term adverse impacts on the functions and values of the riparian habitat. **(Existing LCP Revised: Recommendations 9-13 on pages 28-29)**

Policy C-OSRC-5c(3): Channelizations, dams, or other substantial alterations of rivers and streams shall be prohibited except for: (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat. Any channelization or stream alteration permitted for one of these three purposes shall minimize impacts to coastal resources, including the depletion of groundwater, and shall include measures sufficient to mitigate unavoidable impacts. Alternatives that incorporate a biotechnical component to river or stream bank stabilization (e.g., pocket planting and joint planting, vegetated crib walls, vegetated slope gratings, etc.) shall be encouraged over alternatives that employ strictly hard solutions (e.g., concrete wall or riprap banks). Where there is conflict the more specific permissible use provisions of this policy shall control over the more general use provisions for other types of ESHA identified in **Policy C-OSRC-5b(7)**. **(New)**

Policy C-OSRC-5c(4): Maintain and restore the biological productivity and the quality of coastal waters, streams, wetlands, and lakes in order to maintain optimum populations of marine organisms and to protect human health. **(New)**

Policy C-OSRC-5c(5): To protect fishery resources and minimize impacts on water supply, projects which would limit in-stream flows shall comply with State Water Resources Control Board's Policy for Maintaining Instream Flows in Northern California Coastal Streams, adopted under Resolution 2013-0035, effective February 4, 2014 (23 CCR Section 2921). **(New)**

Policy C-OSRC-5c(6): In Anadromous Fish Streams (Chinook and Coho Salmon Habitat), the following uses and activities shall be prohibited:

- (1) Dredging.
- (2) Dams and other structures which would prevent upstream migration of anadromous fish unless other measures are used to allow fish to bypass these structures. **(Existing LCP Revised)**

Policy C-OSRC-5c(7): Where riparian corridor impacts are permitted in conformity with the Coastal Act and any applicable Local Coastal Plan policies, adverse impacts on riparian vegetation shall be mitigated at a ratio of at least 3:1 to compensate for the temporal and functional loss of affected habitats. **(New)**

Policy C-OSRC-5c(8): As part of the environmental review process, refer permit applications near streams to California Department of Fish and Wildlife and other agencies responsible for natural resource protection. **(GP 2020)**

3.5 Wetlands

Policy C-OSRC-5d(1): Wetlands shall be defined and delineated consistent with the definitions of the Coastal Act, the Coastal Commission Regulations, and this Local Coastal Plan, as applicable. Wetlands include any area where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of plants which normally are found to grow in water or wet ground. Wetlands are here defined to include marshes, ponds, seeps, and reservoirs. The upland limit (encompassing the greatest extent) of a wetland is designated as 1) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover; 2) the boundary between soil that is predominantly hydric and soil that is predominantly non-hydric. Typical wetland vegetation includes, but is not limited to: pickleweed, cordgrass, Jaumea, salt grass, rushes, bulrushes, sedges, cattails, tule, marsh rosemary, marsh grindelia. Any unmapped areas that meet these criteria are wetlands and shall be accorded all of the protections provided for wetlands in the Local Coastal Plan. A delineation report prepared for wetlands within the Coastal Zone shall reference and describe for the property in question any wetlands information documented in the National Wetlands Inventory. **(Existing LCP revised)**

Policy C-OSRC-5d(2): Wetland extents shall be determined in conformance with the direction provided in **Appendix E-4**. The Coastal Act definition of wetland (Section 30121) does not distinguish between wetlands according to their quality. Thus, poorly functioning or degraded areas that meet the definition of wetlands are subject to the wetland protection policies of this Local Coastal Plan. **(New)**

Policy C-OSRC-5d(3): Establish and maintain buffer areas, a minimum of 100 feet in width, in a natural, undeveloped, condition along the periphery of all wetlands. Wetland buffers shall be developed in accordance with **Appendix E-3**; between 100 and 300 feet from wetlands, prohibit construction of agricultural, commercial, industrial and residential structures unless the Permit and Resource Management Department finds the wetland would not be affected by such construction. **(Existing LCP Revised)**

Policy C-OSRC-5d(4): In Bodega Harbor Tideflats, the following uses and activities shall be prohibited:

- (1) Motor vehicles.
- (2) Dredging and filling, except in accordance with **Policy C-OSRC-5d(5)**
- (3) Discharge of effluent, including those of land- and boat-based origins.

Policy C-OSRC-5d(5): Diking, filling, draining, and dredging of coastal waters, wetlands, and estuaries shall be permitted only in accordance with other applicable provisions of this Local Coastal Program, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to uses and methods described in Habitat Protection Guidelines, **Appendix E-5**. The more specific permissible use provisions of this policy shall control over the more general use provisions for other types of ESHA identified in **Policies C-OSRC-5b(7) and C-OSRC-5e(4)**. **(New)**

Policy C-OSRC-5d(6): In wetlands, the following uses and activities shall be prohibited:

- (1) Motor vehicles.
- (2) Diking, filling, and dredging, except in accordance with **Policy C-OSRC-5d(5)**.
- (3) Discharge of stormwater or wastewater unless it maintains or enhances wetland function and receiving water quality.
- (4) Agricultural activities, including grazing.
- (5) Removal of vegetation except where necessary to maintain plant, fish and wildlife habitat.
- (6) Construction of agricultural, commercial, industrial, and residential structures:
 - a. Within 100 feet.
 - b. Between 100 to 300 feet, unless it would not have an adverse impact on the wetland.
- (7) New water diversions from streams which feed wetlands. **(Existing LCP Revised)**

Policy C-OSRC-5d(7): In cooperation with resource agencies, require landowners to erect wildlife-passable fencing around springs, seeps, and ponds located on grazing land as a condition of permit approval and to develop watering areas outside of wetlands and riparian corridors. **(Existing LCP Revised)**

Policy C-OSRC-5d(8): Where wetlands fill or development impacts are permitted in conformity with the Coastal Act and any applicable Local Coastal Plan policies, require mitigation measures to compensate for the temporal and functional loss of affected wetlands and associated habitat. Mitigation must meet the criteria in the Habitat Protection Guidelines, **Appendix E-5**. In order of preference, compensatory mitigation may include on-site restoration of degraded wetlands, off-site restoration of degraded wetlands, acquisition of offsite areas of equal or greater biological productivity, or creation of tidal wetlands. Adverse impacts shall be mitigated at a ratio of at least 4:1 for all types of wetlands. If no appropriate restoration site is available, wetland mitigation credit may be purchased, prior to disturbing wetlands, at a resource agency-approved mitigation bank whose service area includes Sonoma County's coastal zone.¹ **(New)**

3.6 Marine Habitats

Policy C-OSRC-5e(1): Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms for long-term commercial, recreational, scientific, and educational purposes. Mitigation for impacts to marine habitats shall be provided at a minimum ratio of 4:1. The more specific mitigation requirements shall control over the more general mitigation requirements of this Local Coastal Plan. **(New)**

Policy C-OSRC-5e(2): At rocky intertidal coastline, the following uses and activities shall be prohibited:

- (1) Motor vehicles.
- (2) Development of groins, breakwaters, piers, sea walls, pipelines, or other structures which alter natural shoreline processes. Existing structures causing water pollution or fish mortality shall be phased-out or upgraded where feasible. **(Existing LCP Revised)**

¹ The U.S. Army Corps of Engineers maintains an index of approved wetland mitigation banks. The index is available via the agency's San Francisco District website at: <http://www.spn.usace.army.mil/Missions/Regulatory/Mitigation-Banks/Approved-Banks-for-the-San-Francisco-Regulatory-Di/>

Policy C-OSRC-5e(3): Public access to Offshore Rocks and onshore nesting/rookery areas used by seabirds to breed or nest or which provide habitat for seals and sea lions shall be prohibited. **(Existing LCP Revised: Recommendation 39 on page 31)**

Policy C-OSRC-5e(4): On sand beaches, spits, or bars, the following uses and activities shall be prohibited:

- (1) Motor vehicles, except for those required for management or emergency use.
- (2) Removal of sand.
- (3) Opening of sand bars, except where necessary for maintenance of tidal flow to ensure the continued biological productivity of streams and associated wetlands and to prevent flooding. Applications for allowable opening shall include a plan, prepared in consultation with and reviewed by applicable resource agencies (e.g., National Marine Fisheries Service and California Department of Fish and Wildlife) that describes measures that will be implemented to avoid and/or minimize impacts on special status species affected by the proposed action. Sand bars shall not be breached until there is sufficient in-stream flow to preserve anadromous fish runs. **(Existing LCP Revised)**

Policy C-OSRC-5e(5): Disturbance of marine mammal haul-out grounds shall be prohibited and recreational activities near these areas shall be limited to passive recreation. Disturbance of areas used by harbor seals and sea lions shall be avoided. **(Existing LCP Revised)**

Policy C-OSRC-5e(6): Encourage the California Department of Fish and Wildlife to monitor Marine Mammal Haul-Out Grounds on an annual basis to determine their condition and level of use by marine mammals; and to incorporate this information into its management plan for marine mammals. **(Existing LCP Revised)**

Policy C-OSRC-5e(7): Encourage the pertinent state and federal agencies to carry-out the following activities to preserve kelp beds:

- (1) Monitor the size and viability of the kelp beds for all ecological functions including fish habitat;
- (2) Regulate and monitor activities such as sewage disposal, dredging, and renewable energy development, and other projects which could degrade nearshore marine water quality and hence have an adverse impact on kelp habitat;
- (3) Prohibit petroleum and other forms of energy development which may have a significant impact on kelp beds as a result of normal operations or accidents (e.g., oil spills and well blow-outs); and
- (4) Require applicants for commercial or industrial kelp harvesting to conduct studies, in consultation with the California Department of Fish and Wildlife, of the specific

sites or areas proposed for kelp harvesting. The studies shall identify measures that could be implemented following harvest to restore these sites to their pre-harvest condition, including identification of reference sites and performance standards for determining restoration success. Require any authorized harvesting to be conducted consistent with the recommendation of the studies, including site restoration measures. **(Existing LCP Revised)**

3.7 Terrestrial Habitats

Policy C-OSRC-5f(1): On dunes/coastal strand, the following uses and activities shall be prohibited:

- (1) Uses other than resource-dependent, scientific, educational, and passive recreational uses including support facilities.
- (2) Public access during the breeding and nesting seasons of special status animals.
- (3) Motorized vehicles, except those required for management or emergency use.
- (4) Disturbance, damage, or removal of dune vegetation except as required for park construction or maintenance projects for which revegetation or removal of non-natives is a condition of project approval.
- (5) Removal of sand except where required for construction of parks and support facilities. **(Existing LCP Revised)**

Policy C-OSRC-5f(2): On dunes/coastal strand, carry-out the following activities to preserve native vegetation:

- (1) Limit public access in areas of plant communities.
- (2) Post signs which explain the importance of limiting public access to protect plant communities.
- (3) Where public access is allowed, develop and use well-defined footpaths or raised boardwalks. **(Existing LCP Revised)**

Policy C-OSRC-5f(3): The following guidelines shall be used for developing public access on Coastal Bluffs:

- (1) Steps, trails, and paths shall be sited and designed so as to minimize erosion and disruption to native vegetation.
- (2) In areas of heavy recreational use, surfaced steps, trails, and paths shall be constructed.
- (3) In areas of moderate recreational use, to the extent available and consistent with the resource protection policies of this Local Coastal Plan, local materials (obtained

from the site) shall be used to construct steps, trails, and paths. **(Existing LCP Revised: Recommendations 45-46 on page 31)**

Policy C-OSRC-5f(4): At coastal bluffs, the following uses and activities shall be prohibited:

- (1) Removal of sand or rock except that necessary for road maintenance.
- (2) Public access off established steps, trails, or paths; and motor vehicles. Equestrian use shall be restricted to areas where ground compaction and erosion from use of horses would not have an adverse impact on bluff stability. **(Existing LCP Revised: Recommendations 40-44 on page 31)**

Policy C-OSRC-5f(5): Carry-out the following activities to preserve coastal terrace prairie:

- (1) At Bodega Head and Stump Beach, sites shall be developed for the public to observe cormorants and other seabirds; and
- (2) At Stillwater Cove County Park, use of the upland area for habitat education activities shall be encouraged. **(Existing LCP Revised)**

Policy C-OSRC-5f(6): The identification through site assessment, preservation, and protection of native trees and woodlands shall be required. To the maximum extent practicable, the removal of native trees and fragmentation of woodlands shall be minimized; any trees removed shall be replaced, preferably on the site at a greater than 1:1 ratio (and at a greater than 3:1 ratio for riparian trees); and permanent protection of other existing woodlands shall be provided where replacement planting does not provide adequate mitigation. **(GP2020 Revised)**

Policy C-OSRC-5f(7): Identify important oak woodlands; assess current protection of oak woodlands; identify options to provide greater protection of oak woodlands, including identification and removal of trees infected with *Phytophthora ramorum*, and their role in connectivity, water quality, and scenic resources; and develop recommendations for regulatory protection and voluntary programs to protect and enhance oak woodlands through education, technical assistance, easements, and incentives. **(GP2020)**

Policy C-OSRC-5f(8): In Mendocino Pygmy Cypress Forest, the following uses and activities shall be prohibited:

- (1) Motor vehicles, except for those required for management or emergency use.
- (2) Construction of permanent structures, except where necessary for scientific and educational uses. **(Existing LCP Revised)**

Policy C-OSRC-5f(9): Encourage preservation of remaining old growth Redwood and Douglas Fir forests in private ownership. Because of their rarity and biological importance, these forests should be made priorities for protection through conservation easements, fee title purchase, or other mechanisms. **(GP2020 Revised)**

Policy C-OSRC-5f(10): At, around, and near osprey nest sites, the following shall be prohibited:

- (1) Removal of osprey nests.
- (2) Removal of snags and dead tops of live trees.
- (3) Development of new structures and roads.

Recreational activities shall be limited to low-intensity passive recreation, these areas are particularly vulnerable during the period of egg incubation in May to July and activities should be further limited.

Osprey nest sites located adjacent to Willow Creek, Freezeout Creek, and Russian River shall be protected from disturbance by timber harvesting activities. **(Existing LCP Revised)**

Policy C-OSCR-5f(11): For development in locations known, or determined by environmental review, to potentially have breeding or nesting sensitive bird species, two weeks prior to any scheduled development, a qualified biological monitor shall conduct a preconstruction survey of the site and within 500 feet of the project site. For purposes of this provision, sensitive bird species are those species designated threatened or endangered by state or federal agencies, California Species of Special Concern, California Fully Protected Species, raptors, and large wading birds. In addition, surveys must be conducted every two weeks for sensitive nesting birds during the breeding season. If nesting sensitive birds are detected at any time during the breeding season, the California Department of Fish and Wildlife shall be notified and an appropriate disturbance set-back will be determined and imposed until the young-of-the-year are no longer reliant upon the nest. In no cases shall the buffer be less than 100 feet. **(New)**

Policy C-OSRC-5f(12): At offshore rocky and intertidal egret or heron rookeries, the following uses and activities shall be prohibited:

- (1) Public access.
- (2) Construction of structures or roads within 600 feet.
- (3) On Penny Island, uses other than low intensity scientific and educational uses, managed so as not to interfere with nesting activity (February to mid-July).

(Existing LCP Revised)

Policy C-OSRC-5f(13): On coastal bluffs, public access in areas used by birds for nesting or resting, and removal of native plant species shall be minimized. **(Existing LCP Revised)**

4. COMMERCIAL FISHING AND SUPPORT FACILITIES POLICY

The previous Local Coastal Plan had a separate chapter on Harbors. The harbor and marina facilities, commercial fishing, and harbor construction and maintenance sections of that chapter have been incorporated into the Open Space and Resource Conservation Element under this Commercial Fishing and Support Facilities section.

4.1 Background

Sonoma County contains marine and inland fisheries and a growing aquaculture industry. Bodega Harbor is the home of a major commercial fishing fleet with berths, boat launching ramps, fish receiving piers, a navigation channel, and a marina. Commercial and sport fishing net salmon, crab, herring, halibut, shark, and bottom fish.

4.1.1 California Coastal Act

The 1976 California Coastal Act supports coastal-dependent development stressing protection of commercial and sport fishing and necessary support facilities as a coastal dependent and recreational use. Coastal dependent and recreational uses are considered priority uses under the Coastal Act.

4.1.2 Climate Change

The following discussion of the potential impacts of climate change on fisheries is based on information on the U.S. Environmental Protection Agency's 2013 Website:

Climate change may impact fisheries on and off the Sonoma County coast. Fisheries are highly dependent on specific climate conditions. Warmer water temperatures are likely to cause the habitat ranges of many fish and shellfish species to shift, which could disrupt ecosystems. Many marine species have certain temperature ranges at which they can survive. Many aquatic species can find colder areas of streams and lakes or move northward along the coast or in the ocean. However, moving into new areas may put these species into competition with other species over food and other resources. Some diseases that affect aquatic life may become more prevalent in warm water. Changes in temperature and seasons could affect the timing of reproduction and migration.

In addition to warming, the world's oceans are gradually becoming more acidic due to increases in atmospheric carbon dioxide (CO₂). Increasing acidity could harm shellfish by weakening their shells, which are created from calcium and are vulnerable to increasing acidity. Acidification may also threaten the structures of sensitive ecosystems upon which some fish and shellfish rely.

Overall, climate change could make it more difficult to catch fish in the same ways and same places as we have done in the past. Many fisheries already face multiple stresses, including overfishing and water pollution. Climate change may worsen these stresses. In particular, changes in water temperature could lead to significant impacts on fisheries. It is not possible to predict with any accuracy the impacts of climate change on fisheries along the Sonoma County coast in the next 20 years.

4.1.3 Offshore Marine Protected Areas

While offshore areas are beyond the County's Local Coastal Program jurisdiction, there are a number of notable and important natural areas offshore of the Sonoma County coast. In particular, there are two National Marine Sanctuaries managed by the National Oceanic and Atmospheric Administration (NOAA), Gulf of the Farallones National Marine Sanctuary and Cordell Bank National Marine Sanctuary, and one national monument, the California Coastal National Monument, which is managed along the entire California coastline by the United States Bureau of Land Management (BLM). Together, these three areas represent major coastal national resources for the County and the State. Various Federal and State restrictions on fishing and other commercial and recreational activities apply within these areas.

Gulf of the Farallones National Marine Sanctuary. The Gulf of the Farallones National Marine Sanctuary is a 966-square-nautical-mile conservation area that extends from Bodega Bay along the western shores of Sonoma and Marin counties. Much of the eastern boundary of this sanctuary occurs along the shores of Marin County, with a smaller portion also bordering southwestern Sonoma County near Bodega Bay. This sanctuary contains a vast range of marine habitants and biodiversity, and NOAA has identified the area as containing exceptional natural resources worthy of special recognition, protection, and designation as a National Marine Sanctuary. The latest management plan for this sanctuary was drafted in October of 2008.

Cordell Bank National Marine Sanctuary. The Cordell Bank National Marine Sanctuary is a 399-square-nautical-mile that borders the Gulf of the Farallones National Marine Sanctuary to the west. This sanctuary contains unique oceanic conditions and topography, as it features substantial variations water depth along its western boundary, ranging from 115 below the sea surface to 6,000 feet below the sea and

continuing further beyond the sanctuary boundaries. These steep and sudden pinnacles and ridges in the sea make for complex sediment distribution and biodiversity. The latest management plan for this sanctuary was also drafted in October 2008.

California Coastal National Monument. The California Coastal Monument is a major, statewide national monument that spans the entire coastline of the state of California, and contains 20,000 rocks and islands (but not major islands, such as the Channel Islands, Farallon Islands, or islands within the San Francisco Bay) and 1,100 miles of total coastline. Overall, the monument area also extends 12 nautical miles from the shore. The Resource Management Plan, approved in September 2005, provides guidance on the ways in which the BLM is to collaborate with the California Department of Fish and Wildlife (CDFW, formerly California Department of Fish and Game) and the California Department of Parks and Recreation to ensure effective day-to-day management of the monument. In addition, the Resource Management Plan lists goals, objectives, management actions, allowable uses, and operating frameworks to develop the decisions and actions necessary to preserve and enhance the California Coastal Monument. Portions of the Coastal National Monument overlap with the Gulf of the Farallones and Cordell Bank National Marine Sanctuaries.

4.1.4 Oil Exploration and Development

Oil exploration and development on the Sonoma County coast may adversely affect sensitive areas identified in the Local Coastal Plan. Streams and estuaries serve as nursery areas and habitats for commercial fish species and are especially vulnerable to damage by an oil spill. Offshore activities such as oil platforms, pipelines, and tankers could interfere with commercial fishing activities. Ocean disposal of wastewater could adversely affect nursery areas and the commercial fishing industry. See the Outer Continental Shelf Development Policy section of the Land Use Element for information and policy on oil exploration and development on the Sonoma County coast.

4.1.5 Bodega Bay and Harbor

Bodega Bay is a natural coastal embayment located in southwestern Sonoma County, about 58 miles north of the entrance to San Francisco Bay and 20 miles west-southwest of Santa Rosa. The bay is shaped like a crescent and bound by an abrupt hill, Bodega Head, on the north; and Tomales Bluff on the south. A lagoon, commonly known as Bodega Harbor, is located at the northern end of Bodega Bay, and is separated from the Bay proper by a natural sand spit commonly known as Doran Spit; and from the Pacific Ocean by an extensive area of sand dunes just north of Bodega Head. The entrance to the harbor is protected from the prevailing northwesterly and westerly

winds and seas by Bodega Head and is safe for passage of fishing and recreational boats throughout the year.

Bodega Harbor is home to a major commercial fishing fleet - about 300 commercial fishing vessels with 250 permanent berths at the Spud Point Marina. During the commercial salmon season, an additional 200 vessels and 600 sport boats use Bodega Harbor. It is the largest fishing port between San Francisco and Fort Bragg. As an all-weather port, Bodega Harbor serves as a safe harbor of refuge during winter storms. Existing fishing industry facilities at the harbor include two berth installations, three boat launch ramps, commercial fish receiving piers, and a federal navigation channel maintained by the U.S. Army Corps of Engineers (**Table C-OSRC-1**). Public dock and berth facilities are provided at Doran County Park, Westside County Park, and Bodega Bay Dunes State Beach. Other facilities at Bodega Harbor include The Tides Wharf and Lucas Wharf, multifaceted facilities with a hotel, restaurant, and fish market where hundreds of vessels offload their catch each year; a U.S. Coast Guard Search and Rescue Base on the navigation channel; and the University of California Bodega Marine Life Reserve on the west side of the harbor.

Table C-OSRC-1: Existing Dock and Berth Facilities for the Commercial Fishing Industry in Bodega Harbor

Facility	Number
Berths	210
Tie-ups	45-50
Moorings (dock or marina)	30-35 (year round)
Boats anchored in outer bay during salmon season	10-50
Boat size range	18-65 feet
Unloading docks	5
Fuel docks	3
Ice and blower stations	4
Haul-out areas	1 (under 40 feet)
Dry docks	1
Repair areas	3 (small)
Launch ramps	1 private (small), 2 public

The Rivers and Harbors Act of 1938 authorized the federal project improvements in Bodega Harbor. Completed in 1943, these federal improvements provided a bulkhead to retain the sand spit; an entrance channel 100 feet wide and 12 feet deep protected by two jetties; a navigation channel of the same dimensions about 16,020 feet long to the

town of Bodega Bay that continues southeast about 4,200 feet along the shore; and three turning basins. Additional federal projects authorized in 1965 and completed in 1975 provided a concrete pile breakwater at Spud Point and an access channel from the existing federal navigation channel to a proposed local marina. The Sonoma County Regional Parks Department (County Regional Parks) completed Spud Point Marina in 1985, which consists of 244 berths and the facilities identified in the Master Plan, with the addition of a laundromat and restrooms with showers.

County Regional Parks) operates three County facilities at Bodega Bay: Spud Point Marina, Mason's Marina, and the Sport Fishing Center. Spud Point Marina generates the majority of its revenue on berthing, fuel sales, and ice sales to commercial salmon and crab fishermen. These revenues are heavily dependent on the availability and quality of salmon and crab each season. Other dependencies include state and federal approvals for the fishing season as well as the economy in general. In past years, entire fishing seasons have been closed due to sparse fish populations or other fish and shellfish harvest prohibitions. Without a robust salmon and crab season, a good economy, and high selling prices for the fishermen, the revenue stream will not be sufficient to support Spud Point Marina. Mason's Marina was leased to a private operator for forty years ending in 2013 and is now operated by County Regional Parks. The marina was able to generate some revenue, however required maintenance (the responsibility of the lessee) was not performed, and there are significant deferred maintenance issues. The Sport Fishing Center uses the staff of Spud Point Marina and has historically operated within budget. The required repairs to the three marina facilities, recent efforts to improve and reduce the cost of marina operations and increase revenue, and potential long-term opportunities for the future of Bodega Bay are described in the 2013 *Bodega Bay Opportunities: Business Improvement Proposal and Potential Long-term Strategies* prepared by County Regional Parks.

4.1.6 Commercial Fishing Industry

Chinook (king) salmon and Dungeness crab are the major fish species of the commercial fishery on the Sonoma County coast, centered at Bodega Bay. Other fish species of this commercial fishery include rockfish, albacore tuna, sole, red urchin, California halibut, lingcod, sablefish, thornyhead, and cabezon. Populations of these commercial fish species, particularly salmon, are on a decline. The California coastal chinook salmon and the central California coast coho salmon, which inhabit the Russian River, were listed as federal endangered species in 1990 and 1996, respectively.

Bodega Bay's commercial fishing industry, which took off during World War I and focused primarily on salmon, drove the local economy and structured life in the area.

Deposition of silt in Bodega Bay in the late 1930s and early 1940s threatened the sustainability of the fishing industry, but it bounced back after the Bay was dredged in 1943. By the early 1980s the fishing fleet grew to about 300 boats, and during this period the value of commercial fish landings reached more than 15 million dollars. After record catches in the late 1980s, the salmon industry again came upon hard times as the number and value of salmon landings plummeted. Many fishermen left commercial fishing as their livelihoods were jeopardized. Following a resurgence in the area's salmon populations in the middle 1990s, the deposition of silt in Bodega Bay again became a problem. A 2004 community profile prepared by the Northwest Fisheries Science Center of the NOAA indicates the sedimentation in Bodega Bay is paramount to the community as the only port between San Francisco and Fort Bragg that is large enough for many ocean-going vessels.

The organization Ecotrust reported that between 1981 and 2004, overall commercial fish landings and revenues at ports declined in the study area comprised of the Bodega Bay, San Francisco Bay, and Half Moon Bay areas. Bodega Bay area port landings and revenues account for about 20 percent of the regional landings and 25 percent of total revenues in the study area. However, landings and revenues at the port at Bodega Bay has declined from around 10 million pounds and dollars in the 1980s to half that in the 1990s. Sonoma County Agricultural Crop Reports show commercial fish landings on the Coast have generally declined over 45 percent from 3.5 million pounds in 2002 to 1.8 million pounds in 2008.

The causes for the ecological and economic decline of commercial fisheries on the North Coast has been the subject of debate among fishermen, scientists, and environmentalists and include habitat degradation from timber harvesting, agriculture, and hydroelectric dams; non-point source pollution; overfishing by commercial and sport fishermen; and regulatory restrictions. A NOAA report released in spring 2009 cited poor ocean conditions, which among other things resulted in a decrease in the food supply, as a major factor in the sharp decreases in Chinook salmon, Coho salmon, seabird, and marine mammal populations along the California Coast.

The Sonoma County Water Agency (Water Agency) is charged with balancing Russian River water demands by its urban and agricultural customers and at the same time protecting the endangered Coho salmon. In 2008 the National Marine Fisheries Service issued a Biological Opinion that requires the Water Agency to take specific measures to preserve these three species. As of 2009 a habitat enhancement program within Dry Creek and a pipeline project to bypass the creek and bring water directly to the Russian River are being designed and implemented. In addition, water stored in Lake Mendocino

is carefully managed so there is enough water in the Russian River for fall Chinook salmon migrations.

According to North Coast fishermen, 2008 and 2009 were the worst fishing seasons in many years. Salmon accounts for roughly half of the average fisherman's income. As the salmon populations decline, so does the commercial salmon fishery and the livelihood and survival of commercial fishermen. Some fishermen have and will find other ways to survive such as doing more crab fishing; fishing for smaller fish such as rock cod, herring, or albacore tuna; or fishing for the giant Humboldt squid or the slime eel that is a popular delicacy in Korea. Some fishermen will barely survive, and others will give up their livelihood. The number of small fishermen on the Pacific Coast has been steadily declining for years. The Pacific Coast Federation of Fishermen's Associations had 1,400 members in 2009, compared to more than 3,000 when it was founded in 1976.

4.1.7 Bodega Harbor Maintenance Dredging

Continued use and expansion of the existing facilities in Bodega Harbor depend on future maintenance dredging of the federal navigation and local channels and marinas. Under the Rivers and Harbors Act of 1938, the United States Army Corps of Engineers (Corps of Engineers) is authorized to continue operations and maintenance dredging of the federal navigation channel in Bodega Harbor. The Operations and Maintenance Dredging Program of the Corps of Engineers is responsible for maintaining safe federal navigation channels and harbors, thus is responsible for maintaining the federal projects described above.

Constructing the federal navigation channel and turning basins entailed dredging 1,814,100 cubic yards of sediment. Since the channel and basins were completed in 1943, maintenance dredging has been conducted on a cycle of 10-12 years, reflecting a very low sediment deposition rate in the channel of 10,000-12,000 cubic yards per year. Past maintenance dredging of the federal navigation channel and turning basins was conducted in 1948 (275,000 cubic yards), 1961 (383,000 cubic yards), 1968 (100,000 cubic yards), 1980 (70,000 cubic yards), 1992 (69,000 cubic yards), and 2004 (< 1,000 cubic yards). About 209,000 cubic yards of sediment were dredged in 1984 to construct Spud Point Marina. County Regional Parks also dredged near Spud Point Marina B Dock in Fall 2009.

The October 2003 *Bodega Bay Harbor: Dredged Material Management Plan* prepared by the Corps of Engineers concludes that available upland sites for disposal of dredge spoils are insufficient to adequately maintain the federal navigation channel. In 2003 the Corps of Engineers was directed, under a cost share project with the Regional Parks

Department, to rehabilitate the Old Airport Disposal Site used in the past for disposal of spoils from maintenance dredging of the federal navigation channel; initiate a program for maintenance dredging of the federal navigation channel; and make suitable dredged material available to County Regional Parks for development of public facilities (see the New Airport/Community Park Disposal Site under Disposal Site Alternatives below).

Dredge Spoils Disposal Sites. A variety of sites have been used or evaluated for disposal of dredge spoils from Bodega Harbor, including the Old Airport Disposal Site, Westside Park, Doran Spit, outer Bodega Bay, and just north of Bodega Harbor.

In October 2003, the Corps of Engineers analyzed eleven alternatives for disposal of material dredged from Bodega Harbor. The alternatives included upland disposal, beach augmentation, and deep ocean disposal. (*Bodega Bay Harbor: Dredged Material Management Plan*) The analysis compared the reuse permit requirements, available disposal volume, distance to the disposal site from the dredging site, timing, technical and logistical issues, project cost, monitoring cost, and environmental impacts of these alternatives.

In 2017 the Corps selected the San Francisco Deep Ocean Disposal Site located about 65 nautical miles offshore from Bodega Harbor. The current capacity of the SF-DODS far exceeds Bodega Bay Harbor's current and estimated future disposal needs for the next 25 years.

4.1.8 Marine Debris

Marine debris is trash found in the oceans or along its shores. The source of marine debris can be classified as either ocean-based or land-based depending on where it enters the water. Ocean-based marine debris is waste that is disposed of in the ocean by ships, recreational boats, and petroleum rigs and platforms. Land-based debris is debris that blows, washes, or is discharged into the water from land. Studies estimate that about two thirds of marine debris enters the water from land. Contributors include recreational beach users, people who drop litter on sidewalks and streets, plastics manufacturers and transporters, inadequate sewage treatment operations, and illegal dumping.

Debris in the marine environment means hazards for humans and wildlife. It endangers the safety of beach visitors and scuba divers and endangers the safety and livelihood of fishermen and recreational boaters. Beach visitors have required stitches from stepping on broken pieces of glass and metal buried in the sand, and scuba divers have become entangled in lost fishing gear. Nets and monofilament fishing line can obstruct boat

propellers and plastic sheeting and bags can block boat engine cooling intakes. Such damage is hazardous and costly in terms of repair and lost fishing time.

State and Federal Programs. The California Coastal Commission and NOAA have Marine Debris Programs. The NOAA Marine Debris Program supports national and international efforts to research, prevent, and reduce the impacts of marine debris. It serves as a centralized capability within NOAA, coordinating and supporting activities within NOAA and with other federal agencies, as well as using partnerships to support projects carried out by state and local agencies, tribes, non-governmental organizations, academia, and industry. The NOAA Marine Debris Program has launched the Marine Debris Clearinghouse, a new online tool for tracking and researching marine debris projects and resources. Currently this database allows users to browse or search records of past, current, and future projects which are funded by the Marine Debris Program and focus on marine debris removal, research, and outreach. NOAA plans to expand this database to include information from federal partners and the broader marine debris community. The site will grow to include a library of best practices, regional action plans, technical documents, and papers that reflect the state of knowledge of a given topic area within the study of marine debris.

The California Coastal Commission Marine Debris Program consists of California Coastal Cleanup Day, the Adopt-A-Beach program, public education about marine debris, and collaboration with state and regional agencies on developing new programs and policies to help prevent and reduce marine debris. Every year on the third Saturday in September, people join together at sites all over California to take part in the State's largest volunteer event, California Coastal Cleanup Day, organized by the California Coastal Commission and Coastwalk. Families, friends, coworkers, scout troops, school groups, service clubs, and individuals come together to celebrate and share their appreciation of California's beautiful coast and waterways. California Coastal Cleanup Day is part of the larger International Coastal Cleanup, the largest volunteer event on the planet.

GOAL C-OSRC-6: **Support the commercial fishing industry in Bodega Bay. Protect and conserve the quality of ocean, marine, and estuarine environments for their scenic, economic, and environmental values.**

Objective C-OSRC-6.1: Provide adequate facilities and services to serve the commercial fishing industry in Bodega Bay.

Objective C-OSRC-6.2: Conduct dredging in a manner that minimizes impacts on the ocean, marine, and estuarine environments.

Objective C-OSRC-6.3: Conduct the disposal of dredged material in a manner that minimizes impacts on the ocean, marine, estuarine, and terrestrial environments; and minimizes impacts to groundwater and water supply.

Objective C-OSRC-6.4: Support the Marine Debris Programs of the National Oceanic and Atmospheric Administration and California Coastal Commission.

The following policies, in addition to those in the Agricultural Resources Element, Land Use, Water Resources Element, and Public Safety Element shall be used to achieve these objectives:

Commercial Fishing Industry Facilities

Policy C-OSRC-6a: Encourage the development of support facilities and the provision of support services for the commercial fishing industry, including fish processing, in areas designated Marine Industrial on the Land Use Plan Map. **(Existing LCP Revised)**

Policy C-OSRC-6b: Marina development in Bodega Bay will be reviewed based on the following: 1) a review of the Bodega Harbor operations, with special emphasis on whether activities that do not depend on a harbor location can be relocated to preclude or minimize the need for additional dredging and filling; and 2) an assessment of the adequacy of the fisheries resources to support such expansion; and 3) that the resources would not be harmed by increasing the availability of berths for the commercial fishing industry. **(Existing LCP Revised)**

Policy C-OSRC-6c: Encourage the development of additional support facilities and the provision of additional support services at Spud Point Marina necessary to adequately serve the commercial fishing industry. **(Existing LCP Revised)**

Bodega Harbor Dredging Regulations

Policy C-OSRC-6d: Dredging shall be required to occur only in the winter, when most marine and estuarine animals are not migrating or spawning and are least sensitive to turbidity. **(Existing LCP Revised: Recommendation 77 on page 34 and Recommendation 13 on page 123)**

Policy C-OSRC-6e: The deposition of fill or dredge spoils in Bodega Harbor shall be prohibited, except according to Section 30233 of the California Coastal Act. **(Existing LCP Revised)**

Policy C-OSRC-6f: The deposition of dredge spoils shall be prohibited outside Bodega Harbor in Bodega Bay east of the line extending from the tip of Tomales Point, to the tip of Bodega Head. **(Existing LCP Revised)**

Policy C-OSRC-6g: Approval of a detailed reclamation plan shall be required for a dredge spoils disposal site prior to commencing any dredging that would generate dredge spoils to be disposed of at that site. **(Existing LCP Revised)**

Policy C-OSRC-6h: Consider sea level rise adaptation strategies when evaluating dredge disposal options and evaluate the feasibility of using dredge material for beach sand augmentation and dune restoration. **(New)**

Upland Disposal Sites

Policy C-OSRC-6i: Any dredge spoils disposal project shall be designed and implemented to protect groundwater resources and existing and potential domestic water supplies, and to be consistent with all policies of this Local Coastal Plan for protection of wetlands and other Environmentally Sensitive Habitat Areas (ESHA). **(Existing LCP Revised)**

Policy C-OSRC-6j: Route the dredge spoils conveyance pipeline to upland disposal sites from Bodega Harbor along the right-of-way of existing roads, where possible. **(Existing LCP Revised)**

Policy C-OSRC-6k: Riparian corridors at dredge disposal sites shall be protected. Diked ponds for disposal of dredge spoils shall be sited and designed to avoid the riparian area, such that no dredge spoils would be deposited in the drainage and no runoff would enter the drainage or the freshwater wetland; and to be consistent with all policies of this Local Coastal Plan for protection of wetland and other Environmentally Sensitive Habitat Areas (ESHAs). **(Existing LCP Revised)**

Policy C-OSRC-6l: At upland disposal sites, the operation of construction equipment across drainages between dredge spoils disposal ponds shall be limited to one haul road. Following the disposal of dredge spoils and consistent with all policies of this Local Coastal Plan for protection of wetland and other Environmentally Sensitive Habitat Areas (ESHAs), the road shall be removed, the area shall be regraded to natural drainage contours, and vegetation shall be re-established. **(Existing LCP Revised)**

Policy C-OSRC-6m: A reclamation plan shall be implemented for any upland disposal site which assures rapid re-establishment of vegetation, minimize visual impacts, and improve wildlife habitat, consistent with all policies of this Local Coastal Plan for protection of wetland and other Environmentally Sensitive Habitat Areas (ESHAs). **(Existing LCP Revised)**

Policy C-OSRC-6n: Prior to approval of a plan for a large, one-time dredge spoils disposal at the Old Airport Disposal Site, a full evaluation shall be required of the

potential visual, water quality, and reclamation issues associated with raising the dikes to accommodate the dredge spoils. **(Existing LCP Revised)**

Policy C-OSRC-6o: The rare plants in the marsh south of the Old Airport Disposal Site shall be protected during the course of any construction on the site. **(Existing LCP Revised)**

Policy C-OSRC-6p: The Old Airport Disposal Site shall be reclaimed and restored to the maximum extent feasible following each maintenance dredging. **(Existing LCP Revised)**

5. SOIL RESOURCES POLICY

Soil resources policy is to maintain soil productivity and prevent lands with productive soils from converting to non-resource uses, and to promote soil management and conservation practices that will maintain productivity of those lands.

5.1 Agricultural and Timber Soils

Important farmland soils are located throughout the County but are concentrated primarily in the Sonoma Valley, west Sebastopol, west Santa Rosa, Alexander Valley, and Dry Creek Valley areas. Important farmland soils on the Sonoma County coast include grassland suitable for sheep and cattle grazing along the coastal terrace and lower slopes on the North Coast and throughout the County coast south of Jenner. Soil, climate, topography, and water combine to make these lands highly productive agricultural areas. However, lands with good agricultural soils are often desirable for building sites as they are generally located in flat valleys with few physical constraints. Important timberland soils are located primarily in the northwest County and Russian River area. Important timberland soils on the County coast are located primarily north of Russian Gulch and in the Willow Creek watershed.

GOAL C-OSRC-7: **Encourage the conservation of soil resources to protect their long-term productivity and economic value.**

Objective C-OSRC-7.1: Preserve lands containing prime agricultural and productive woodland soils and avoid their conversion to incompatible residential, commercial, or industrial uses.

The following policies, in addition to those in the Land Use and Agricultural Resources Elements, shall be used to achieve these objectives:

Policy C-OSRC-7a: Apply the Agriculture land use category to areas with productive agricultural soils. **(GP2020)**

Policy C-OSRC-7b: Apply the Timber land use category to all lands with timberland production zoning. **(GP2020)**

5.2 Soil Erosion

Although some types of soils are more susceptible to erosion, all soils benefit from conservation practices. Erosion results in the loss of topsoil which may reduce crop yields and cause sedimentation problems downstream. Sediment can fill reservoirs and stream channels, reduce water quality and storage capacity, and damage fish and wildlife habitats. Susceptibility to soil erosion is highest in areas with a combination of high rainfall, lack of cover, erodible soils, and steep slopes. Activities which may increase erosion include urban development, road and general construction activities, logging, mining, agriculture, and recreational activities.

Hillside cultivation and overgrazing are a particular concern in agricultural areas. Measures are needed to reduce erosion. However, erosion protection measures may not always be cost effective for the landowner.

GOAL OSRC-8: **Promote and encourage soil conservation and management practices that maintain the productivity of soil resources.**

Objective C-OSRC-8.1: Ensure that permitted uses are compatible with reducing potential damage due to soil erosion.

Objective C-OSRC-8.2: Establish ways to prevent soil erosion and restore areas damaged by erosion.

The following policies, in addition to those in the Agricultural Resources Element, shall be used to achieve these objectives:

New Development Design Standards

Policy C-OSRC-8a: Coastal Development Permits shall be subject to the following requirements for reducing erosion and erosion control:

- (1) Projects shall be designed so that structures and roads are not located on slopes of 30 percent or greater.

- (2) Erosion control measures shall be incorporated as part of projects involving construction or grading near waterways or on lands with slopes over 10 percent.
- (3) A soil conservation program shall be incorporated as part of projects which could increase erosion of waterways or hillsides.
- (4) New roads and driveways for residential, ranch, and timber harvest uses shall be designed and constructed to retain natural vegetation and topography to the extent feasible.
- (5) Improvements near waterways or in areas with a high risk of erosion as noted in the *Sonoma County Soil Survey* shall be designed and constructed to retain natural vegetation and topography to the extent feasible. **(GP2020) (Existing LCP Revised: Recommendation 49 on page 31, Recommendations 11-12 on page 38, Recommendation 40 on page 31, Recommendations 52-53 on page 32, and Recommendation 11 on page 54)**

Policy C-OSRC-8b: Continue to enforce the County Building Code to reduce soil erosion and slope instability problems. **(GP2020)**

6. TIMBER RESOURCES POLICY

6.1 Background

The following section of the 1976 California Coastal Act applies to timberlands:

Section 30243. The long-term productivity of soils and timberlands shall be protected, and conversions of coastal commercial timberlands in units of commercial size to other uses or their division into units of non-commercial size shall be limited to providing for necessary timber processing and related facilities.

6.1.1 Timberland Resources

Forests and woodlands provide a number of aesthetic and ecological benefits such as wildlife habitat, watershed protection, scenic views, and recreation. These forest values are important to the quality of the environment and life in the County and are addressed in the Water Resources Element and other sections of this Open Space and Resource Conservation Element.

Forests also provide commercial timber as a renewable resource. Sonoma County is unique among counties in California in having a majority (94 percent) of the timberlands as privately owned. In Sonoma County timberlands are predominantly in the northwest part of the County. There are about 232,000 acres of timberland in the County. About 20,500 acres of the 232,000 acres of timberland in the County are on the County coast. These timberlands are comprised of about 14,000 acres of Site Class IV

soils and about 6,500 acres of Site Class I, II, and III soils combined. Site Class is a reference to the productivity of timberland, determined by the interaction of soil fertility and climate; the lower the site class, the greater the timberland productivity.

About 75 percent of the land on the Sonoma County coast is used as timberland, sheep and cattle grazing land, or dairy land. The Coast is equally divided between land suitable for timber production and land suitable for grazing or pasture.

The County coast exhibits the diversity of tree species found throughout the County. Soil, climate, topography, and human activity are the important factors which determine the growth and distribution of tree species. Redwood predominates in the coastal fog belt, with Douglas fir and grand fir the other principal forest trees. Commercial forest on the Coast is found primarily north of Russian Gulch and in the Willow Creek watershed. Forests occur generally east of State Highway 1 and in coastal gulches. Commercial hardwood harvesting of tan oaks is becoming more important for masonite chips, firewood, and the crafts industry. Other native, generally non-commercial trees on the Coast are Bishop pine, oak, madrone, bay, and the southern extent of the pygmy forest in California. Rows of eucalyptus and cypress trees have been planted as a buffer against the wind, and fast growing Monterey pine screen many homes from the view of State Highway 1. Dense forests of these trees have been planted by the developers of The Sea Ranch and Timber Cove subdivisions.

Both the economic and natural values of coastal woodlands and forests are recognized in the policies and regulatory mechanisms included in the Local Coastal Plan. For purposes of the regulations discussed below, timberlands are generally considered to be those lands which are capable of and available for growing a commercial species of timber such as redwood and Douglas fir.

6.1.2 Timberland Regulations

1973 Forest Practices Act. In 1973 the Z'berg-Nejedly Forest Practices Act was established, setting up the rules for the California Department of Forestry and Fire Protection (CalFire) to follow with respect to timber harvesting. Timber Harvest Plans (THPs) must be filed with CalFire in most instances when trees are logged. CalFire is the lead agency responsible for approving and ensuring compliance of THPs with the Forest Practices Rules and other applicable regulations. A conversion permit must be obtained from CalFire to convert timberland to a non-timber use; approval of conversion permits for the Coastal Zone is very unlikely.

CalFire regulates the silvicultural activities related to THPs. Forest Practice Rules are established for different geographical areas of the State. The Coast Forest District Rules

apply to most of Sonoma County. The California Coastal Commission's Special Treatment Area Rules apply to Special Treatment Areas designated within the Coastal Zone. The State Board of Forestry has the authority to amend either the Forest Practice Rules or the geographical districts to which they are applied.

Most THPs filed for the Coastal Zone are for timber harvests of less than 100 acres. CalFire indicates that 52 THPs have been filed for the Sonoma County coast since 1983. Although the number of THPs filed for the Sonoma Coast is not as great as in adjacent Mendocino County, the coastal timber resource is significant locally.

Timberland Production (Preserve) Zones. In 1976 the California Legislature adopted the Forest Taxation Reform Act. That Act required counties to provide for the zoning of parcels used for the growing and harvesting of timber as Timberland Preserve Zones (TPZs). A TPZ restricted the use of the land to the growing and harvesting of timber and compatible uses approved by the County in return for tax assessment benefits. Subsequently in the late 1970s the County designated many parcels TPZ.

In 1982 the California Legislature adopted the California Timberland Productivity Act. That Act required counties to designate and zone lands for the primary use of timber production in order to protect properly conducted timber operations from being prohibited or restricted due to conflict or apparent conflict with surrounding land uses. The County applied local Timberland Production (TP) zoning to all parcels previously placed in the TPZs under the 1976 Forest Taxation Reform Act. There are about 20,500 acres of timberland in the Coastal Zone of which approximately 11,000 acres are zoned TP the remainder is zoned RRD (Resources and Rural Development).

Rezoning timberland parcels to TP establishes ten-year use restrictions and the requirement for a forest management plan which should provide for timber harvesting within a reasonable period of time and set timber restocking standards. Sonoma County's implementing TP Ordinance allows parcels of 40 acres or more of Site Class I and II soils, and 80 acres or more of Site Class III and IV soils to be zoned TP. The annual tax paid on acreage of timberland zoned TP is based on the value of the land without the standing timber and is substantially less than if zoned at fair market value. Taxes on the value of the cut timber are paid at the time of harvest.

Sonoma County's TP Ordinance sets a minimum residential density of one dwelling per 160 acres (with a maximum of four dwellings per parcel where allowed by the 160-acre density). This number is set by the State law on TP zones. Parcels this size are intended to encourage timber management or sale to an owner wishing to manage the land for timber production. Creation and sale of smaller parcels, such as 40 or 80 acres, after the seller has cut as much timber as possible prior to the sale, may make the parcels

undesirable for sustained timber management. Smaller parcels are less viable for timber management and encourage greater residential conflicts. The larger the parcel, the better the chance for long-term timber production.

6.1.3 Timberland Environmental Impacts

Pressures on timberland include rural development, agricultural conversions, and increased public scrutiny regarding the potential impacts associated with logging operations, particularly near streams. These issues can affect both the economic feasibility of the timber industry and/or the long term availability of timber resources.

Logging activities, if improperly managed, can be detrimental to the forest environment, including loss of riparian habitat and soil erosion, and a resulting diminishing of all forest values. Sustainable logging practices and forest management should result in a forest resource which regenerates itself and allows for perpetuating related forest values. Keeping forest lands in production and preventing a further incursion of incompatible adjacent lands uses will benefit the public and the timber industry.

Since State law gives primary regulatory responsibility for timber operations to CalFire, the County's land use authority is limited. Instead, the County has focused its policy directives on maintaining a sustainable supply of timber resources in the future by reducing the potential for converting timberland to incompatible uses.

GOAL C-OSRC-9: **Preserve, sustain, and restore forestry resources for their economic, conservation, recreation, and open space values.**

Objective C-OSRC-9.1: Identify and preserve areas with timber soils and commercial timber stands for timber production. Reduce incompatible uses and the conversion of timberlands to agriculture and other uses which effectively prevent future timber production in these areas.

Objective C-OSRC-9.2: Minimize the potential adverse impacts of timber harvesting on economic, conservation, recreation, and open space values; and restore harvested areas to production for a future yield.

The following policies, in addition to those in the Land Use Element, shall be used to achieve these objectives:

Policy C-OSRC-9a: A Coastal Permit shall not be required for timber harvesting in accordance with a timber harvest plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practices Act of 1973 and regulated by the Forest Practices Act

and the California Department of Forestry and Fire Protection. **(Existing LCP Revised)**

Policy C-OSRC-9b: Apply the Timber land use category to designate all lands in a Timberland Production Zone and adjacent parcels with timber soils or commercial timber stands. **(GP2020)**

Policy C-OSRC-9c: Review all timber harvest plans for compatibility with Local Coastal Plan policies and economic viability of the industry. **(GP2020)**

Policy C-OSRC-9d: Where applicable, comment on timber harvest plans in support of increased protection of Class III streams. **(GP2020)**

Policy C-OSRC-9e: Review timber harvest plans adjacent to designated Riparian Corridors and request that clear cutting not occur within streamside conservation areas. Where clear cutting along designated Riparian Corridors is approved by the applicable state or federal agency, ensure that at least 50 percent of the overstory canopy and at least 50 percent of the understory vegetation be retained. **(GP2020)**

7. MINERAL RESOURCES POLICY

Although various minerals have been mined in Sonoma County during the past century, mining operations at the current time consist almost exclusively of the extraction and processing of rock, sand, and earth products for use in construction and landscaping. From 1995 to 2002, an average of 4.84 million tons of construction aggregate was mined and marketed each year to meet local needs and a share of the North Bay regional needs. Approximately 75 to 112 million tons are likely to be needed over the next 20 years. The Bodega Bay Quarry, formerly Cheney Gulch Quarry, was the only active mining operation in the Coastal Zone for about 60 years. It is no longer active and was released and reclaimed in 2012.

The potential impacts of mining activities include, but are not limited to, noise, dust, air emissions, truck traffic, erosion, siltation, and loss of agricultural land. These impacts create conflicts with nearby residential, agricultural, and recreational uses and may impact habitat and fishery resources.

The State Geologist classifies or inventories mineral lands throughout the State and has designated certain mineral reserve areas as being of regional significance. By law, local agencies must adopt mineral management policies that recognize mineral information provided by the State, assist in the management of land use that affect areas of statewide and regional significance, and emphasize the conservation and development of identified mineral deposits.

Accordingly, Sonoma County has adopted the Aggregate Resources Management (ARM) Plan to set forth the State mandated mineral management policy for the County. During the process of adopting the plan, the County considered the aggregate resource areas classified as MRZ-2 by the State Geologist.

Land use policies have been formulated with full recognition and consideration of the classification and designation information transmitted by the State (State Department of Conservation, California Geological Survey Special Report 175 and subsequent amendments) and incorporated by reference herein. Sonoma County has considered the importance of its aggregate resources to the regional market and not just to the County.

GOAL C-OSRC-10: **Provide for production of aggregates to meet local needs and contribute the County's share of demand in the North Bay production-consumption region. Manage aggregate resources to avoid needless resource depletion and ensure that extraction results in the fewest environmental impacts.**

Objective C-OSRC-10.1: Use the Aggregate Resources Management Plan to establish priority areas for aggregate production and to establish detailed policies, procedures, and standards for mineral extraction.

Objective C-OSRC-10.2: Minimize and mitigate the adverse environmental effects of mineral extraction and reclaim mined lands.

The following policies, in addition to those in the Land Use Element, shall be used to achieve these objectives:

Policy C-OSRC-10a: Consider areas zoned Mineral Resources (MR) or areas designated by the State Mining and Geology Board as regionally significant for construction grade aggregate as priority sites for aggregate production and mineral extraction. Within the Coastal Zone, these areas presently include sandstone deposits located in Cheney Gulch, approximately 2.5 miles east of Bodega Bay in western Sonoma County.² Review requests for additional designations for conformity with the Local Coastal Plan and the Aggregate Resources Management (ARM) Plan. **(GP2020)**

Policy C-OSRC-10b: Review projects for environmental impact and land use conflicts and consider the following minimum factors when approving mining permits: topsoil salvage; vegetation, fisheries and wildlife impacts; noise impacts; erosion control;

² This area is identified as Sector Q in the 1987 Department of Conservation, Division of Mines and Geology report, entitled *Mineral Land Classification: Aggregate Materials in the San Francisco - Monterey Bay Area: Special Report 146, Part 3: Classification of Aggregate Resource Areas: North San Francisco Bay Production-Consumption Region*.

roadway conditions and capacities; reclamation and bonding; air quality impacts; energy consumption; engineering and geological surveys; aggregate supply and replenishment; drainage; and the need for economical aggregate materials. **(GP2020)**

Policy C-OSRC-10c: Review projects that are on or near sites designated Mineral Resources in the Aggregate Resources Management Plan for compatibility with future mineral extraction. **(GP2020)**

8. ENERGY RESOURCES POLICY

8.1 Background

Sonoma County coast residents and businesses consume energy in many forms and for many uses, but primarily oil and gas for transportation and electricity for home and business. Residents and businesses also produce energy in individual, small scale uses. Therefore, energy resources are addressed in two sections. The first section addresses how the community can reduce future energy demand through conservation and efficiency measures. The second section addresses how the County can contribute to future energy supplies.

8.1.1 Climate Change

The following discussion of the potential impacts of climate change on energy resources is based on information on the U.S. Environmental Protection Agency's 2013 Website.

Changes in temperature, precipitation, sea level, and the frequency and severity of extreme storm events will likely affect how much energy is produced, delivered, and consumed in the United States.

Energy plays an important role in many aspects of our lives. For example, we use electricity for lighting and cooling. We use fuel for transportation, heating, and cooking. Our energy production and use is interconnected with many other aspects of modern life, such as water consumption, use of goods and services, transportation, economic growth, land use, and population growth. Our production and use of energy (most of which comes from fossil fuels) also contributes to climate change, accounting for more than 80 percent of U.S. greenhouse gas emissions.

Temperature, Energy Demand, and Energy Supply. Increases in temperature will likely change how much energy we consume, as well as our ability to produce electricity and deliver it reliably. In a warmer climate, Americans would use more electricity for air conditioning and less natural gas, oil, and wood for heating. Heating demand would decrease the most in the northern United States, and cooling demand would increase

the most in the southern United States. Changes in energy demand will likely affect greenhouse gas emissions, but the net effect depends on which energy sources are used for electricity and heating.

Warming is likely to increase summer peak electricity demand in most regions of the United States. Meeting increases in this peak demand could require investments in new energy infrastructure. A warmer climate may reduce the efficiency of power production for many existing fossil fuel and nuclear power plants because these plants use water for cooling. The colder the water, the more efficient the generator. Thus, higher air and water temperatures could reduce the efficiency with which these plants convert fuel into electricity.

Water Availability and Energy. Energy is needed to pump, transport, and treat drinking water and wastewater. Cooling water is needed to run many of today's power plants. Hydroelectricity (electricity produced by running water) is itself an important source of power in some parts of the United States. Changes in precipitation, increased risk of drought, reduced snowpack, and changes in the timing of snowmelt in spring will likely influence our patterns of water and energy use.

Power plants can require large amounts of water for cooling. Parts of the United States face increased competition for water to meet the demands of population and economic growth while also protecting natural ecosystems. Consequently, these regions are already slowing or stopping plans for new power plants that require large withdrawals of water due to concerns about adequate availability of cooling water. More frequent and severe heat waves will likely increase the demand for electricity in these areas. At the same time, decreased rain and/or increased temperature and evaporation would likely result in reduced water supplies. Since water is necessary for electricity production, these combined effects could stress water resources. Growing crops for biomass and biofuel energy could stress water resources in certain regions, depending on the type of crop, where it is grown, agricultural production in the region, and current water and nutrient management practices. Rising temperatures, increased evaporation, and drought may increase the need for energy-intensive methods of providing drinking and irrigation water. For example, desalinization plants can convert salt water into freshwater, but consume a lot of energy. Climate change may also require irrigation water to be pumped over longer distances, particularly in dry regions across the western United States.

Sea Level Rise, Storm Surge, and Extreme Events. A large portion of U.S. energy infrastructure is located in coastal areas and therefore sensitive to sea level rise and storm surge. For example, fuel ports and the generation and transmission lines that bring electricity to major urban coastal centers are at risk. Changes in the frequency and

severity of storms and other extreme events may also damage energy infrastructure. Disruptions to energy supply due to compromised infrastructure can affect many activities, depending on the destination and final use of the fuel. Disruptions in the supply of oil would affect the production of transportation fuels. Disruptions in natural gas supply could affect electricity generation, residential and commercial heating, and industrial processes. Offshore oil drilling platforms are vulnerable to extreme weather events. Additional information on the coastal risks to climate related hazards can be found on the Public Safety Element of this Local Coastal Program.

Flooding and intense storms can damage power lines and electricity distribution equipment. These events may also delay repair and maintenance work. Electricity outages can have serious impacts on other energy systems as well. Sea level rise adaptation policies are also found in the Public Safety Element of the Local Coastal Plan.

Wind Speed, Cloud Cover, and Renewable Energy. Climate change could impact wind and solar power, but there is little research in this area. Impacts will depend on how wind and cloud cover patterns change, which are very difficult to project using current climate models.

8.2 Energy Conservation and Demand Reduction

Reducing energy demand can be achieved in many ways. Land use strategies include compact development form and promoting mixed uses. Energy used for transportation can be reduced through increased use of pedestrian and bicycle travel, public transit, and alternative fuels. Other strategies include improved construction standards and agricultural practices, solid waste management, and education.

Sonoma County has led the way in programs designed to conserve energy in County operations, including building audits, lighting retrofits, and electric and hybrid fleet vehicles. The County has also initiated the Sustainable Policies and Practices Project that aims to monitor and reduce energy use in all County operations on an ongoing basis. In 2005, Sonoma County became the first county in the nation where the County and all of its Cities pledged to measure and reduce their greenhouse gas emissions by 25 percent below 1990 levels by 2015. The County later passed a resolution including long- term goals for greenhouse gas emissions of 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. Reducing energy demand is the primary strategy for meeting this target. Much more work is needed to ensure that the County's efforts are coordinated with evolving state and federal initiatives.

GOAL C-OSRC-11: Promote energy conservation and contribute to energy demand reduction.

Objective C-OSRC-11.1: Increase energy conservation and improve energy efficiency in County government operations.

Objective C-OSRC-11.2: Encourage residents and businesses to increase energy conservation and improve energy efficiency.

Objective C-OSRC-11.3: Reduce the generation of solid waste and increase solid waste reuse and recycling.

Objective C-OSRC-11.4: Reduce greenhouse gas emissions.

The following policies, in addition to those in the Land Use and Circulation and Transit Elements, shall be used to achieve these objectives:

Policy C-OSRC-11a: The latest green building certification standards, such as the CalGreen Tier 1 standards, shall be used for new development, including redevelopment. **(GP2020)**

Policy C-OSRC-11b: Encourage the water and wastewater service providers to reduce energy demand from their operations. **(GP2020)**

Policy C-OSRC-11c: Support project applicants in incorporating cost effective energy efficiency design that exceeds State standards. **(GP2020 Revised)**

Policy C-OSRC-11d: Manage timberlands for their value both in timber production and offsetting greenhouse gas emissions. **(GP2020)**

8.3 Energy Production and Supply

Energy production in Sonoma County is dominated by the electricity generated from geothermal resources at The Geysers. This source generates about 5,000,000 megawatt-hours per year. Additional sources include hydroelectric power, methane gas, and solar photovoltaics. Additional opportunities exist for individual and small scale production from other renewable energy sources, including passive solar collection, wind energy, hot water, and biomass. These sources have distinct advantages over the more traditional fossil fuel sources such as oil and gas in that they typically have lower up-front costs, better efficiency, and minimal environmental impacts.

GOAL C-OSRC-12: Contribute to the supply of energy primarily by increased reliance on renewable energy sources.

Objective C-OSRC-12.1: Increase the development of renewable energy and distributed energy generation systems and facilities for County operations.

Objective C-OSRC-12.2: Promote the use of renewable energy and distributed energy generation systems and facilities in new development.

Objective C-OSRC-12.3: Establish guidelines and standards for development of energy generation systems and facilities.

Objective C-OSRC-12.4: Encourage exploration of the extent and potential use of hot water geothermal resources.

The following policies, in addition to those in the Land Use and Circulation and Transit Elements, shall be used to achieve these objectives:

Policy C-OSRC-12a: The use of geothermal resources shall be allowed in all land use designations if it can be demonstrated that it will be compatible with surrounding land uses, not degrade coastal views, and is not located within an Environmentally Sensitive Habitat Area (ESHA). **(GP2020)**

Policy C-OSRC-12b: Encourage and promote the development of renewable energy and distributed energy generation systems and facilities for County operations. **(GP2020)**

Policy C-OSRC-12c: Encourage and promote the use of renewable energy and distributed energy generation systems and facilities that are integral to and contained within existing and new development (e.g., solar thermal installations to provide space and water heating or solar electric installations for small commercial buildings or residences in rural areas, small wind energy systems to provide electricity to agricultural accessory structures, etc.) that do not impact ESHA, public access, or coastal views. **(GP2020)**

9. AIR RESOURCES POLICY

Air pollutants include both gases and particulates. The automobile is the most common source of smog. Particulates come from residential, industrial, and agricultural sources, mainly during grading and construction activities.

Sources of air pollution are both stationary and mobile. Mobile sources, such as motor vehicles, produce most of the air pollutants in the County. Air pollution from mobile sources is regulated by the State through exhaust emissions standards, but can be reduced by proper management of the transportation system. The Geysers power plants are the largest stationary pollutant source. Other stationary sources include mining operations, industrial and agricultural activities, and lumber mills. Residential wood stoves are a contributor to particulate levels in urban areas in Northern Sonoma County.

Improved air quality and decisions on air quality standards and mitigation measures are balanced with competing interests for production efficiency, energy costs, and ease of transportation while meeting all the requirements of the state and federal Clean Air Acts.

The southern section of the Coastal Zone is within the jurisdiction of the Bay Area Air Quality Management District (Bay Area Air District) and the northern portion of the Coastal Zone is within the Northern Sonoma County Air Pollution Control District (Northern Air District).

The Bay Area Air District is currently designated as a nonattainment area for state and federal ozone standards, the state particulate matter (PM) 10 standard, and the state and federal PM 2.5 standard. The Bay Area Air District has adopted an Ozone Attainment Plan and a Clean Air Plan in compliance with Federal and State Clean Air Acts. These plans include measures to achieve compliance with both ozone standards. The plans deal primarily with emissions of ozone precursors (nitrogen oxides (NOx) and volatile organic compounds, also referred to as Reactive Organic Gases (ROG)).

The Northern Air District does not have an adopted air quality plan because it is in attainment for all federal and state criteria pollutants, although the District occasionally exceeds state standards for PM10.

GOAL C-OSRC-13: **Preserve and maintain good air quality and provide for an air quality standard that will protect human health and preclude crop, plant, and property damage in accordance with the requirements of the state and federal Clean Air Acts.**

Objective C-OSRC-13.1: Minimize air pollution and greenhouse gas emissions.

Objective C-OSRC-13.2: Encourage reduced motor vehicle use as a means of reducing resultant air pollution.

The following policies, in addition to those of the Circulation and Transit Element, shall be used to achieve these objectives:

Policy C-OSRC-13a: Development projects shall be designed to minimize air pollutant emissions. Direct emissions shall be reduced by using construction techniques that decrease the need for space heating and cooling. **(GP2020)**

Policy C-OSRC-13b: Proposed changes in land use shall be denied unless they are consistent with projected air quality levels. **(GP2020)**

Policy C-OSRC-13c: Any proposed new source of toxic air contaminants or odors shall provide adequate buffers to protect sensitive receptors and comply with applicable health standards. Buffering techniques such as landscaping, setbacks, and screening in areas where such land uses abut one another shall be used to promote land use compatibility. **(GP2020)**

Policy C-OSRC-13d: Residential units may only install fireplaces, woodstoves, or any other residential wood-burning devices that meet the grams-per-hour Environmental Protection Agency or Oregon Department of Environmental Quality wood heater emissions limits (exempt devices are not allowed). **(GP2020)**

10. ARCHAEOLOGICAL AND HISTORIC RESOURCES POLICY

10.1 Background

Historic preservation is intended to maintain reminders of the County's heritage and development. Archaeological sites provide information on the history and culture of Sonoma County's earliest residents and can be disturbed by development activities. Heritage and Landmark trees enhance the quality of the environment and have historical significance.

A goal of the Local Coastal Plan is to protect the historic resources of the Sonoma Coast to maintain reminders of the area's heritage and development. This section of the Open Space and Resource Conservation Element contains a brief history of the Sonoma County coast, a description of the Coastal Zoning Ordinance provisions designed to protect historic resources, information on the inventory of historic resources on the Coast, and policies for protection of historic resources. The Coast has a rich and varied human history extending from Native American settlement six to ten thousand years ago to the tourist boom of the 1900's. Historic uses that drove major increases to the coastal population include, fishing, furring, logging and development of local mills, the gold rush, and tourism, many of which remain important today.

10.1.1 Early History and Peoples

Native American settlement began on the coast 6,000-10,000 years ago. The Kashaya Pomo lived on the Russian River and northern coast. The Coast Miwok lived south of the River; their region included southern Sonoma County and Marin County. Both groups occupied a narrow territory extending from the coast several miles inland. The Pomo likely had more contact with Russians who settled Fort Ross in the early 1800's and became somewhat acculturated to them. By the 1870's the Pomo survived in three

villages. By 1915 a reservation was granted for their permanent residence. The Miwok were subjected to European influence by the San Francisco and Sonoma Missions.

10.1.2 1500 to 1775

Early English and Spanish explorers came to the Sonoma County coast: Juan Rodriguez Cabrillo in 1542, Drake in 1579, and Cermeño in 1595. In October 1775, Lieutenant Don Juan Francisco de la Bodega y Quadra sailed to Anchorage. The log of this voyage named the Bay for Bodega.

10.1.3 1800's

The 1800's increased settlement of the Sonoma County coast. In 1809 the Russians came south from Alaska seeking furs and a food source. They located a village near what is now the town of Bodega and built Fort Ross approximately 20 miles north. After the destruction of the sea otter, the Russians began to fail financially and sold to Captain John Sutter in 1841. The commercial marketing of lumber and lumber products began when Captain Smith brought the first steam saw mill in the 1840's. Railroads, sailboats, and steam schooners were used to get timber from the mills to market. Landings occupied Del Mar and Black Point at The Sea Ranch, Stewarts Point, Fisk Mill, Salt Point, Walsh's Landing (now Ocean Cove), Stillwater south of Stillwater Cove, Timber Cove, Fort Ross, Russian Gulch, Rules Landing, and Duncans. The great redwoods were almost all logged by the 1880's.

During the Gold Rush squatters broke up the great ranchos, as in the Bodega Squatters War of 1859. By 1851 Valley Ford became a community. In 1853 the ranch owned by Captain Smith was renamed Bodega Corners and present day Bodega Bay was developed as a harbor. The coastal roads met at the harbor, and by the 1870's the New England style town became the largest town, including three stores, one hotel, and three lodges. St. Theresa's church, built by Yankee shipbuilders, served many local Irish. The Potter School, once the "finest in the county", had dances, social gatherings, and a Dramatic Society formed in 1874. Eventual silting of the harbor curtailed further commercial expansion. Stewarts Point was founded in 1857 as a shipping port and remains a village with the original buildings and families. The route of the North Pacific Coast Railroad was completed in 1877, which contributed to a great increase in dairy farming along the coast and the development of Duncans Mills.

10.1.4 1900's

The landings used for logging ceased operation in the 1920's. Forest products and second growth mills continued until 1930. Agriculture including, livestock, dairy, wheat,

and potatoes, served as the major economic interest replacing lumber on the coast. The State Park system began to expand north to the Russian River as more people visited the Coast beaches. By 1906 Fort Ross was sold for a State Park. The boom caused by the railroad brought dairy herds throughout the coast. Sportsmen and later tourists also took advantage of the area opened by the railroads. A triangular route from San Francisco meant a trip could be made in one day to the Russian River from San Francisco. By 1900, wealthy residents of Santa Rosa bought summer homes at Bodega Bay. The tourist industry flourished after construction of roads like State Highway 1 built in the 1920's. In the 1930's the Russian River area was popular for name bands and summer camps. Bodega Bay was dredged in 1943, opening the bay for pleasure boats and commercial fishing. The fishing industry grew rapidly as an industry and tourist attraction, and Bodega Bay became a fishing village.

The Sonoma County coast has changed dramatically over the last half century. The tourist industry boomed after World War II. Improvements to State Highway 1 made travel along the coast less daunting. The State of California and County of Sonoma have preserved large portions of the coastline for parks and recreation - Sonoma Coast State Park (and beaches), Salt Point State Park, and Fort Ross State Historic Park; and Gualala Point Regional Park and Stillwater Cove Regional Park, respectively. These parks plus development of private visitor-serving facilities brought more tourists to the coast. Several private residential developments including Timber Cove, (1961), The Sea Ranch (1964) and Bodega Harbor (1971) have increased the resident population and options for vacationers. As these communities have grown, the Sonoma County coast has gradually evolved an economy based primarily on recreation and tourism, although logging and fishing are still important activities.

10.1.5 Historic Landmarks and Resources

The County maintains an inventory of historic resources. The Historic Resources Inventory includes Historic Landmarks, Historic Districts, and other historic resources (e.g., structures, buildings, bridges, roads, cemeteries, landscaping, trees, and sites) without HD zoning. Future historic resources may be identified as new surveys are conducted. These historic resources may be designated as a County Historic Landmark or County Historic District.

A Historic Combining Zoning District (HD) was established in 1974. Structures, sites, or parcels are zoned HD only after a recommendation by the County Landmarks Commission and approval by the Planning Commission and Board of Supervisors. The Landmarks Commission reviews projects involving new construction, demolition, or exterior alteration of County Historic Landmarks, historic resources in County Historic

Districts, and historic resources on the County Historic Resources Inventory to ensure maintenance of their historic and architectural values and compatibility with existent development. The HD Zoning also protects historic structures from demolition for a period of at least six months, allowing time to explore alternatives to demolition.

A comprehensive survey of historic resources on the Sonoma County coast was conducted prior to adopting the 1981 Local Coastal Plan. The survey identified about 90 individual historic resources, some of which have been designated as Historic Landmarks; and areas of special historic or architectural interest that have been designated as Historic Districts. Two of the County's five Historic Districts are located in the Coastal Zone including Bodega Historic District and Duncans Mills Historic District. The communities of Stewarts Point, Fort Ross, and Duncans Mills and many of the individual historic structures or sites associated with these communities were zoned HD with adoption of the 1981 Local Coastal Plan.

GOAL C-OSRC-14: **Protect and preserve significant archaeological and historical sites and tribal cultural resources that represent the ethnic, cultural, and economic groups that have lived and worked in Sonoma County, including Native American populations. Preserve unique or historically significant heritage or landmark trees.**

Objective C-OSRC-14.1: Encourage the preservation and conservation of historic buildings and structures by promoting their rehabilitation or adaptation to new uses.

Objective C-OSRC-14.2: Encourage preservation of historic buildings, structures, sites, cemeteries, features, and objects by maintaining a Landmarks Commission to review projects that may affect these historic and cultural resources.

Objective C-OSRC-14.3: Encourage the protection and preservation of archaeological and cultural resources by reviewing all development projects in archaeologically sensitive areas.

Objective C-OSRC-14.4: Identify and preserve heritage and landmark trees.

Objective C-OSRC-14.5: Encourage the identification, preservation, and protection of Native American cultural resources, sacred sites, places, features, and objects, including historic or prehistoric ruins, burial grounds, cemeteries, and ceremonial sites. Ensure appropriate treatment of Native American and other human remains discovered during a project.

Objective C-OSRC-14.6: Develop and employ procedures to protect the confidentiality and prevent inappropriate public exposure of sensitive archaeological resources and Tribal cultural resources, sacred sites, places, features, or objects.

The following policies shall be used to achieve these objectives:

Policy C-OSRC-14a: Refer proposals for County Historic Landmark designation and rezoning to the Historic Combining District to the Sonoma County Landmarks Commission. **(GP2020)**

Policy C-OSRC-14b: The Sonoma County Landmarks Commission shall review Historic Resource Surveys and Evaluations and make recommendations for designation of buildings, structures, sites, cemeteries, features, or objects as County Historic Landmarks. **(GP2020)**

Policy C-OSRC-14c: Refer lists of historic buildings, structures, sites, cemeteries, features, and objects proposed for designation as County Historic Landmarks to the Sonoma County Landmarks Commission for its recommendation. **(GP2020)**

Policy C-OSRC-14d: Refer applications for coastal development permits to the Northwest Information Center at Sonoma State University to determine if the project site may contain archaeological or historic resources. If a site is likely to have archaeological resources, a field survey and an archaeological resources report that contains the results of the survey and includes appropriate mitigation measures shall be required. If the site is likely to have historic resources, a field survey and an historic resources report that contains an evaluation of whether the historic resources are significant under state and federal criteria shall be required. **(GP2020) (Existing LCP Revised: Recommendations 79-80 on page 34)**

Policy C-OSRC-14e: Refer applications for development permits that involve the removal, demolition, or alteration of a building, structure, site, cemetery, feature, or object identified in an Historic Resource Survey to the Sonoma County Landmarks Commission for review and mitigation, with the exception of such projects within The Sea Ranch, which shall be referred to the Sea Ranch Design Committee. Measures for removal or demolition may include reuse, relocation, preparation of as-built drawings, and photo-documentation. **(GP2020)**

Policy C-OSRC-14f: Use the Heritage or Landmark Tree Ordinance and the design review process to protect trees. **(GP2020)**

Policy C-OSRC-14g: If a project site is determined to contain Native American cultural resources, such as sacred sites, places, features, or objects, including historic or prehistoric ruins, burial grounds, cemeteries, and ceremonial sites, notify and offer to

consult with the tribe or tribes that have been identified as having cultural ties and affiliation with that geographic area. **(GP2020)**

Policy C-OSRC-14h: Continue to comply with State laws regarding tribal consultation during the Local Coastal Plan adoption and amendment process, the review of coastal development permits, and during CEQA review. **(GP2020 revised)**

Policy C-OSRC-14i: Continue to apply standard conditions requiring notification and evaluation in the event of the discovery of a burial or suspected human remains or other cultural resources, including consultation with the Most Likely Descendant as identified by the California Native American Heritage Commission, in the event that the remains are determined to be Native American. **(GP2020 revised)**

11. IMPLEMENTATION PROGRAMS

The following programs and other initiatives, in addition to policies in this Public Safety Element and those in the Land Use, Public Facilities and Services and Water Resources Elements, shall be used to achieve the objectives of this Local Coastal Program.

11.1 Open Space and Resource Conservation Programs

Program C-OSRC-1: Consider reviewing and updating **Figures C-OSRC-2a** through **2k** every five years to reflect documented occurrences or changes in such habitats. **(GP2020 Revised)**

Program C-OSRC-2: Consider requesting official State Scenic Highway designation for State Highway 1.

Program C-OSRC-3: Develop a comprehensive program for preservation and restoration of the freshwater, brackish, and tidal marshes in the Coastal Zone. Include mechanisms for preservation and enhancement such as land acquisition; zoning restrictions; public and private conservation easements; regulating filling, grading, or construction; floodwater retention; and wetland restoration. **(GP2020 Revised)**

Program C-OSRC-4: Request that the State Department of Parks and Recreation carry-out the following activities to preserve rocky intertidal coastline:

- (1) Designate important rocky intertidal areas as a Marine Reserve or Ecological Reserve, and encourage public agencies or private groups to maintain these areas.
- (2) Designate the mouth and banks of the Estero Americano and its offshore area as an Ecological Reserve, representative of the coastal estuarine environment of Northern California; and

- (3) Encourage use of the public shoreline at Salt Point State Park, Kruse Ranch, and the non-historic areas of Fort Ross State Park to reduce pressure on the marine resources at Stillwater Cove Regional Park. **(Existing LCP Revised)**

Program C-OSRC-5: Develop a mooring plan for Bodega Harbor. **(Existing LCP)**

Program C-OSRC-6: Revise the zoning districts of the Coastal Zoning Ordinance which implement the Timber land use category to be consistent with California Coastal Act Section 30243 to reduce the potential for conversion of coastal commercial timberlands in units of commercial size to non-timber uses or their division into units of non-commercial size. **(GP2020)**

Program C-OSRC-7: In cooperation with the Coastal Commission, State Parks, and Cal Fire Board of Forestry, develop forestry guidelines including best practices to improve habitat health and reduce the risk of wildland fire without restricting public access to the coast. Establish a coastal permit exemption, other exemption process, or master plan for forestry maintenance activities consistent with such guidelines.

Program C-OSRC-8: Develop a Greenhouse Gas Emissions Reduction Program to include the following as a high priority:

- (1) A methodology to measure baseline and future Vehicle Miles Traveled (VMT) and greenhouse gas emissions;
- (2) Targets for various sectors including existing development and potential future development of commercial, industrial, residential, transportation, and utility sources;
- (3) Collaboration with local, regional, and State agencies and other community groups to identify effective greenhouse gas reduction policies and programs in compliance with new state and federal standards;
- (4) Adoption of development policies or standards that substantially reduce emissions for new development;
- (5) Creation of a task force of key department and agency staff to develop action plans, including identified capital improvements and other programs to reduce greenhouse gases and a funding mechanism for implementation; and
- (6) Monitoring and annual reporting of progress in meeting emission reduction targets. **(GP2020)**

11.2 Other Initiatives

Other Initiative C-OSRC-1: In coordination with resource agencies, landowners, and the affected public, conduct a comprehensive study of the cumulative impacts of habitat fragmentation and connectivity loss and the effects of exclusionary fencing on wildlife

movement. If warranted, identify essential habitat connectivity corridors and develop recommendations or policies to protect essential habitat corridors and linkages and to restore and improve opportunities for native plant and animal dispersal. **(GP2020)**

Other Initiative C-OSRC-2: Support voluntary programs for habitat restoration and enhancement, hazardous fuel management, removal and control of invasive exotics, native plant revegetation, treatment of woodlands affected by sudden oak death, use of fencerows and hedgerows, and management of biotic habitat. **(GP2020)**

Other Initiative C-OSRC-3: Support acquisition of conservation easements or fee title by the Sonoma County Agricultural Preservation and Open Space District of designated ESHA. **(GP2020)**

Other Initiative C-OSRC-4: Support non-regulatory programs for protection of streams and riparian functions, including education, technical assistance, tax incentives, and voluntary efforts to protect riparian resources. **(GP2020)**

Other Initiative C-OSRC-5: Recommend that the California Department of Fish and Wildlife carry-out the following activities to preserve Bodega Harbor Tideflats:

- (1) Establish a system in which sections of the tideflats on the west side of Bodega Harbor are open to shellfish harvesting on a rotating basis of every three to five years; and
- (2) Establish more restrictive bag and possession limits and gear restrictions for ghost shrimp (*Callinassa californiensis*), mud shrimp (*Upogebia pugettensis*), and blood worms (*Urechis caupo*). **(Existing LCP Revised)**

Other Initiative C-OSRC-6: Promote and enhance the use of native plants and reduce non-native invasive plants in common areas and on private lots. Support property owners in their efforts to identify and eradicate non-native invasive plants and planting native plants. **(New)**

Other Initiative C-OSRC-7: Encourage landowners to voluntarily participate in a program that protects officially designated individual trees or groves that either have historical interest or significance or have outstanding size, age, rarity, shape or location. **(GP 2020)**

Other Initiative C-OSRC-8: Support the Marine Debris Programs of the National Oceanic and Atmospheric Administration (NOAA) and California Coastal Commission, including California Coastal Cleanup Day and Adopt-A-Beach Program. Use NOAA's Marine Debris Clearinghouse to identify best practices for preventing and reducing marine debris. Consider implementation of these best practices on the Sonoma County coast. **(New)**

Other Initiative C-OSRC-9: Encourage agricultural land owners to work closely with the Natural Resource Conservation Service (NRCS) and local Resource Conservation Districts to reduce soil erosion and encourage soil restoration. **(GP2020) (Existing LCP Revised)**

Other Initiative C-OSRC-10: Request that the State Board of Forestry consider developing and enforcing Special Treatment Area stocking and clear cutting standards on all forest lands in the Coastal Zone. **(Existing LCP Revised)**

Other Initiatives C-OSRC-11: Continue to support educational programs that promote energy conservation; energy efficiency; and solid waste reduction, reuse, and recycling opportunities for County operations, residents and businesses, and local utilities. **(GP2020)**

Other Initiative C-OSRC-12: Support Sonoma Clean Power's efforts to promote and implement renewable and distributed energy systems. **(New)**

Other Initiative C-OSRC-13: Encourage, support, and pursue grant funding for the preparation and periodic updating of Historic Resource Surveys. **(GP2020)**

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PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

PUBLIC ACCESS ELEMENT September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

PUBLIC ACCESS ELEMENT

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PUBLIC ACCESS ELEMENT

1. INTRODUCTION

1.1 Purpose

The objective of the Public Access Element is to identify and evaluate existing and potential coastal areas suitable for public and private recreation, and the type and scale of such potential development.

Outdoor recreation in Sonoma County contributes to the tourism economy, enhances the quality of life for residents and visitors, and conserves unique natural and cultural resources. The diverse and relatively unspoiled character of the natural and built environment is a major contributing factor that inspires the public to explore the Sonoma County coast. The coast offers a variety of recreational experiences and facilities (public shoreline access, trails, water trails, parks, campgrounds, golf courses, equestrian facilities, boat launches) including the following:

- (1) **Public Shoreline Access** – the public’s right to access tidelands to the mean high tide line, defined and established through a Public Access Plan (**Appendix B**).
- (2) **Trails** – trails for bicyclists, equestrians, hikers, disabled users, either separate use or multiple-use.
- (3) **Recreation Facilities** – public and private parks, campgrounds, golf courses, equestrian facilities, and boat launches.
- (4) **Visitor Serving Facilities** – lodging, restaurants, and other commercial services for tourists.
- (5) **Water Trails** – routes for small boats along navigable waterways in the Coastal Zone.

1.2 Relationship to Other Elements

The Public Access Element is coordinated with the Land Use, Open Space and Resource Conservation, Agricultural Resources, Circulation & Transit, and Public Facilities and Services Elements. Following are the relationships among these Elements:

- (1) The Land Use Element identifies how public access and outdoor recreation facilities will relate to land use types, and provides policies for establishing new park and recreation facilities.

- (2) The Open Space and Resource Conservation Element includes design and planning policies addressing Scenic Resources and protection of natural resources that apply to outdoor recreational facility acquisition and development.
- (3) The Public Facilities and Services Element include policies that address public services related to outdoor park and recreation facilities.
- (4) The Agricultural Resources Element identifies policies that address the protection and enhancement of agriculture that apply to surrounding land uses, including outdoor recreation facilities.
- (5) The Circulation & Transit Element identifies transportation policies for accessing recreational facilities as well as bikeways that are critical transportation and recreational features connecting communities and public facilities.

1.3 Scope and Organization

The Public Access Element establishes goals, objectives, and policies to protect and enhance opportunities for the public to visit, access, and recreate in and along the Sonoma County coast. Programs needed to implement proposed policies are also identified. In addition, the Element calls out ongoing or potential future County initiatives, referred to as "Other Initiatives," that support inter-agency and community collaboration around public access issues.

The Shoreline Access and Outdoor Recreation sections of previous Local Coastal Plans have been combined into one section because of the extensive overlap in the facilities and processes of providing access to the shoreline and providing access to parks. The Public Access Element is divided into the following sections:

Introduction – purpose, relationship to other elements, and scope and organization of the Element.

Background – general overview of recreation and public access and the legal basis for public access.

Public Access Facilities – background and policy for facility classification, acquisition, planning and development, and management and operation of publicly accessible parks, trails, and recreational facilities.

Recreational Boating Facilities – background and policy for continuation and improvement of existing recreational boating facilities.

Visitor-Serving Facilities – background and policy for expansion of existing and new commercial services for visitors at specific locations.

Appendix B: Public Access Plan – list, description, and recommendations for existing and proposed publicly accessible parks, trails, and recreational facilities.

2. BACKGROUND

2.1 Overview of Recreation & Public Access

Sonoma County's coastline stretches over fifty-five miles, and its Coastal Zone reaches inland over 6 miles. More than one-quarter of the land area on the coast is in government ownership, but not all of that land is open to the public with appropriate facilities. The Sonoma County Regional Parks Department (County Regional Parks) and the State Department of Parks and Recreation (State Parks) own the majority of the developed facilities and undeveloped land along the coastline. Several other public agencies and private organizations own land and provide limited public access.

The Sonoma County coast draws visitors from all areas of the county and state, especially the Sacramento Valley and the San Francisco Bay Area. Tourism studies indicate that visitors to the Sonoma wine country frequently also visit the Sonoma County coast. Sonoma County residents enjoy being able to easily visit the coast.

Sightseeing has traditionally been the most popular activity on the Sonoma County coast. Other popular activities based on the Sonoma Coast's unique land and water edge qualities include walking on the beach, hiking on the coastal bluffs and upland trails, sunbathing, picnicking, fishing, clam digging, kayaking, surfing, diving, bird watching, photography, tidepooling, and painting.

The summer from June through August is the busiest season for coastal parks, and more than one-third of the visitor days occur during this period, which corresponds to the warmer outdoor camping season. Peak use occurs during holiday weekends (Memorial Day, Fourth of July, and Labor Day) and summer weekends. State parks have over four and one-half million visitors, and County Regional Parks exceed one million visitors.

According to 2011-2012 County Park visitor data, the North Coast and South Coast receive 20 and 80 percent of coastal park visitors (about 150,000 and 600,000 visitors) per year, respectively. The most heavily used beaches are almost all located on the South Coast – Doran Beach, Salmon Creek Beach, Wright's Beach, Goat Rock Beach, and Jenner Beach. At peak use times parking areas for these beaches become full, and visitors have to go to other access points to park.

2.1.1 North Coast

The availability of public access to the Coastal Zone from Gualala to Jenner is quite varied. Some large sections of the coastline and upland areas of the Coastal Zone are

open to the public, including Gualala Point Regional Park, Salt Point State Park, Fort Ross Historic State Park, and North Jenner Beach. At other large sections of the coast public access is limited, including in the area of Stewarts Point, Timber Cove, High Cliffs, and The Sea Ranch community.

There are about 40 miles of trail and over 80 parkland public access points and easements on the North Coast. The use levels tend to drop off from Russian Gulch to the north. Jenner, the southernmost area in California where recreational abalone diving is legal, is a significant recreational draw.

The California Coastal Trail on the North Coast is planned to be a continuous trail alignment extending over 40 miles, connecting Mendocino County with the Russian River. Approximately half of the California Coastal Trail alignment is in public ownership and developed, with numerous gaps in the trail alignment, including the gap between Gualala Point Regional Park and Salt Point State Park.

Access to the Russian River between Duncans Mills and the river mouth is limited to certain areas, with the mouth accessible from Jenner and the Goat Rock area. From the Bridgehaven bridge to Duncans Mills river access is limited to small informal turnout areas. One fee public access point is available in Duncans Mills at the private Cassini Ranch Campground.

In 2009, Sonoma Land Trust acquired the Jenner Headlands, adding a total of 5,630 acres of open space to its conservation lands and further enhancing and expanding recreational opportunities in the North Coast region. The Jenner Headlands are located directly north of the community of Jenner and include approximately 2.5 miles of coastline. Sonoma Land Trust has since transferred the property to The Wildlands Conservancy. The Wildlands Conservancy is developing public access facilities which are anticipated to be open in 2017.

Figures C-PA-1a-g show the Public Accessways in SubAreas 1 through 7 (The Sea Ranch North through Duncans Mills) of the Sonoma County coast.

2.1.2 South Coast

The South Coast is very accessible to the public in the Bodega Bay area, although the upland areas of the Coastal Zone are mostly private. There are about 21 miles of trail and over 60 parkland public access points and easements on the South Coast.

The majority of the coastal property from the Russian River to Bodega Head is a part of Sonoma Coast State Park and provides numerous developed and informal access points. The acquisition of the majority of Willow Creek, Wright Hill Ranch, and the Carrington

Ranch will eventually provide extensive public access to the upland areas north of Salmon Creek in the Coastal Zone. Private landholdings in the town of Bodega Bay complicate public access to tidelands in numerous cases, although there are several points at commercial locations where the public can view the tidelands. Public access to the tidelands is available at the County-owned facilities of Spud Point Marina, Westside Park, Bird Walk Coastal Access Trail, and Doran Regional Park. Two public access trails in the Bodega Harbor Subdivision were dedicated to County Regional Parks, and public trails have been developed.

Further south, the Sonoma Land Trust and The Wildlands Conservancy own property adjacent to the Estero Americano and allow very limited access primarily for interpretive hikes and interpretive paddles. The most eastern access point to the Estero Americano is located in Marin County and supports a prescriptive access for canoe/kayak based recreation.

The California Coastal Trail in the South Coast is planned to be a continuous trail alignment over 25 miles long, connecting Marin County with the Russian River, including the Bodega Bay Bike and Pedestrian Trail and the Kortum Trail. More than half of the trail alignment is in public ownership and developed.

Figures C-PA-1h-k show the Public Accessways, Parks, and Trails in SubAreas 8 to 10 of the Sonoma County coast (Pacific View/Willow Creek through Valley Ford).

2.1.3 Public & Private Recreation

Public recreation facilities include developed State and County Regional Parks and beaches; and recent undeveloped parkland acquisitions. Public facilities include beaches, parkland east and west of State Highway 1, and a natural reserve. State and County parklands are almost equally divided between the North Coast (north of the Russian River) and South Coast (south of the Russian River). State and County parklands account for about one-quarter of the land area on the Sonoma County coast, with almost half of the coastline in parks (about 30 miles under State ownership and 3 miles under County ownership).

Private recreation facilities serve a recreation function and are operated by private business for profit, including campgrounds, trailer parks, stables, golf courses, and boat launches. Private facilities comprise about eight miles of coastline and one mile of Russian River frontage, and are important in that they provide a significant portion of the camping on the Sonoma Coast.

2.2 Legal Basis for Public Access

2.2.1 California Constitution

The public's right of access to the tidelands is guaranteed by the California Constitution. This constitutional right was reaffirmed and clarified by the people of California through the passage of Proposition 20 in 1972. Article X, Section 4 of the California Constitution provides:

"No individual, partnership, or corporation, claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this State, shall be permitted to exclude the right of way to such water whenever it is required for any public purpose, nor to destroy or obstruct the free navigation of such water; and the Legislature shall enact such laws as will give the most liberal construction to this provision, so that access to the navigable waters of this State shall be always attainable for the people thereof."

Known as the public trust lands, all submerged lands and all lands lying beneath inland non-tidal navigable waters are owned by the State of California and are subject to the Common Law Public Trust Doctrine. The public trust is a sovereign public property right held by the State for the benefit of all people. The State Lands Commission has jurisdiction and management authority over these lands, which are to be used for public trust uses such as navigation, fisheries, commerce, public access, water-oriented recreation, open space, and environmental protection.

2.2.2 California Coastal Act

The California Coastal Act of 1976 further defines shoreline access policies and establishes a framework for achieving the goal of providing maximum opportunities of public use and enjoyment of the coast.

The California Coastal Act favors enhancing recreational use. The policies address the priorities of different recreational uses on the coast and the amount, location, and distribution of these uses.

The California Coastal Act was amended in the 1979-80 legislative season by the Bane Bill. The Bane Bill addressed water supply, septic issues, transportation, visual impacts, public access, and the build out of The Sea Ranch development. Several sections relate directly to providing public access within the private development. The Bane Bill establishes certain provisions for public access, including parking, access easements, and trails, at specific locations along the Sonoma County coast. These specific requirements are reflected in **Appendix B**, Public Access Plan. The Bane Bill also includes provides for scenic view easements, which are not identified in **Appendix D**.

Scenic view easements allow for the removal of trees in order to restore and preserve scenic views from Highway 1.

2.2.3 California Coastal Trail Act

The Coastal Trail Act requires that the California Coastal Trail be incorporated into regional transportation plans and appoints the State Coastal Conservancy as the lead agency in coordinating the development of the Coastal Trail in consultation with local jurisdictions.

In 2003, the State Coastal Conservancy published *Completing the California Coastal Trail*, a programmatic planning guide. Most of the Sonoma County coast is identified as needing Coastal Trail improvements.

2.2.4 Other Guiding Policy Documents

In 2007 the State Coastal Conservancy and the California Coastal Commission adopted *Standards and Recommendations for Accessway Location and Development*. This document provides general guidelines for the location, size, and type of coastal access facility to ensure that a consistent approach is used along the California Coast. The standards are intended to be flexible to accommodate the variation in sites and circumstances. The standards address hazards, access easements, privacy, environmentally sensitive areas, construction, location, trails and bikeways, scenic overlooks, hostels, and barrier-free facilities. These standards have been incorporated into the public access policies and have guided access recommendations.

The Caltrans *Deputy Directive DD-64-R1 Complete Streets – Integrating the Transportation System* policy directs Caltrans to maximize bicycle, pedestrian, and transit safety and mobility needs during system and corridor planning, project initiation, scoping, and programming. DD-64 is anticipated to facilitate public access in the Highway 1 corridor and may be critical to providing connectivity between coastal resources and public recreation facilities. In addition, Caltrans is preparing several policy documents that will have a bearing on public access, including the California Bike & Pedestrian Plan, and State Route 1 North: Marin and Sonoma Counties Transportation Concept Report.

Other policy documents pertinent to public access and outdoor recreation include the General Plans for State Park Units, California Outdoor Recreation Plan, Sonoma County General Plan 2020, Sonoma County Bike and Pedestrian Plan, Sonoma County Draft Outdoor Recreation Plan (2003), and Sonoma County Agricultural Preservation & Open Space District's Connecting Communities with the Land Plan. The proposed public access facilities within the Coastal Zone Sonoma County General Plan 2020 contains

Mitigation Measure 4.9-7 and Policy PF-2cc requiring adoption and implementation of the Draft Outdoor Recreation Plan. The proposed public access facilities within the Coastal Zone in the above policy documents have been incorporated into the Public Access Plan. In 2002 the Sonoma Land Trust published the Russian River North Coast Parcel Analysis to identify properties with significant recreational value and provide a strategic approach to land and resource preservation.

Accessibility at public outdoor recreation facilities is addressed by several documents. The State and County both have separate system-wide facility planning documents (*Access to Parks Guidelines*) and County (*Countywide ADA Transition Plan*). The *Federal Access Guidelines for Outdoor Accessibility* and the California Building Code are used by the State and County for facility design.

3. PUBLIC ACCESS FACILITIES

3.1 Facility Classification

3.1.1 Parks and Preserves

State Park System. There are numerous classifications for properties within the State Park system. These classifications include State Parks, State Reserves, State Natural Reserves, State Wilderness Areas, State Recreation Units, State Beaches, and State Historical Units. Most of the State facilities within the Sonoma County Coastal Zone are classified as State Parks. There are three State Marine Reserves (Del Mar Landing, Bodega Bay, and Gerstle Cove) and one State Marine Conservation Area (Russian River) in the Coastal Zone that support scientific research, education, and recreation. State Marine Reserves, State Marine Conservation Areas, and some other forms of marine conservation designations are types of Marine Managed Areas (California Fish and Game Code Section 36602) jointly designated by State Parks and the State Fish & Wildlife Department. For a complete description of the State Park System Classification, see Public Resources Code Sections 5019.50-5019.80; and for a complete description of the State Marine Protected Area Classification, see California Fish and Game Code Sections 2850-2863.

State Parks "consist of relatively spacious areas of outstanding scenic or natural character, oftentimes also containing significant historical, archaeological, ecological, geological, or other similar values. The purpose of state parks shall be to preserve outstanding natural, scenic, and cultural values, indigenous aquatic and terrestrial fauna and flora, and the most significant examples of ecological regions of California... Improvements undertaken within state parks shall be for the purpose of making the

areas available for public enjoyment and education in a manner consistent with the preservation of natural, scenic, cultural, and ecological values for present and future generations.” (Public Resources Code Section 5019.53)

State Marine Reserves are a type of State Recreation Unit and State Recreation Area which contain “*ecological, geological, scenic, or cultural resources of significant value...situated seaward of the mean high tide line.*” (Public Resources Code Section 5019.56). They are also a type of Marine Protected Area (MPA), “*a named, discrete geographic marine or estuarine area seaward of the high tide line or the mouth of a coastal river, including any area of intertidal or subtidal terrain, together with its overlying water and associated flora and fauna that has been designated by law, administrative action, or voter initiative to protect or conserve marine life and habitat. MPA classifications include marine life reserves (the equivalent of the state marine reserve classification), state marine parks, which allow recreational fishing and prohibit commercial extraction, and state marine conservation areas, which allow for specified commercial and recreational activities, including fishing for certain species but not others, fishing with certain practices but not others, and kelp harvesting, provided that these activities are consistent with the objectives of the area and the goals and guidelines of this chapter.*” (California Fish and Game Code Section 2852 [c])

The Del Mar Landing State Marine Reserve is located on the Sonoma County coast, approximately 3 miles south of Gualala. Established in 2010, the 140-acre marine reserve spans 0.6 miles of shoreline and extends to a depth of 87 feet. The area was designated as a marine reserve due to its value among the local community and serves to protect abalone and finfish and their habitat. Take of all living marine resources is prohibited within the Del Mar Landing State Marine Reserve.

County Regional Open Space Parks and Regional Open Space Preserves.

Regional Open Space Parks and Regional Open Space Preserves are resource-based properties that support passive recreation. These facilities are typically hundreds of acres in size and have few developed facilities (e.g. parking lots, trail heads, and restrooms). Passive recreation may include hiking, mountain bike riding, horseback riding, and picnicking. As larger facilities, they also play a greater role in preserving functioning ecosystems.

County Regional Recreation Areas. These park areas serve regional needs with active recreational uses such as swimming, sport fields, tennis, boating, and other active sports. The facilities are more highly developed, such as play areas, turf meadows, food concessions, vehicular camping facilities, and equestrian facilities such as arenas. Generally, Regional Recreation Areas are more highly developed facilities.

They are typically less than 200 acres in size. River access facilities, while generally smaller in size, are also included in this category. The majority of coastal campground facilities are included in this category.

Community and Neighborhood Parks. Community and Neighborhood Park needs are based on population-acreage ratios and described further through policies in the Public Facilities and Services Element. Most of the population on the Sonoma County coast is served by private active recreation facilities, decreasing the need for public agencies and special districts to provide similar facilities. The population in the Coastal Zone outside planned communities such as The Sea Ranch, Bodega Harbor Subdivision, and other Bodega Bay subdivisions is relatively low, under 950. In some cases, active recreation facilities are provided to the public at public schools adjacent to the Coastal Zone.

3.1.2 Regional Trails

Regional Trails are trails that provide recreation and transportation connections between protected accessible lands, communities, and/or other points of interest. They provide access and opportunities to experience cultural and natural areas, and generally accommodate non-motorized access for pedestrians, bicycles, equestrians, or multi-use. Trails traverse a variety of terrain, ranging from wide paved surfaces on relatively level ground to narrow, steep, and rocky with minimal improvement. Segments of regional trails can be inside and outside the boundaries of public protected land.

California Coastal Trail. Policy makers and coastal managers have long planned for a continuous coastal trail in California. In 1972, Proposition 20 provided that “A hiking, bicycle, and equestrian trail system shall be established along or near the coast” and that “ideally the trail system should be continuous and located near the shoreline.” The California Coastal Act of 1976 required local jurisdictions to identify an alignment for the California Coastal Trail in their Local Coastal Programs. In 2001, Senate Bill 908 was passed, which requires the Coastal Conservancy, in consultation with State Parks, the Coastal Commission, and other agencies, to complete the trail. The bill was also added to the Public Resources Code as Sections 31408 and 32409.

Although planning for the trail is a statewide effort, the Coastal Commission recommends that local governments include mechanisms for planning and implementation in their Local Coastal Plan, and that the exact location and alignment will still need to be determined locally through community input and consultation with public agencies responsible for implementation. The Coastal Commission is the body responsible for the final determination of the alignment.

The California Coastal Commission and the State Coastal Conservancy define the California Coastal Trail as follows:

"The California Coastal Trail is a continuous interconnected public trail system along the California coastline. It is designed to foster appreciation and stewardship of the scenic and natural resources of the coast and serves to implement aspects of Coastal Act policies promoting non-motorized transportation. The Trail system is to be located on a variety of terrains, including the beach, bluff edge, hillsides providing scenic vantage points, and within the highway right-of-way. It may take many forms, including informal footpaths, paved sidewalks, and separated bicycle paths. When no other alternative exists, it sometimes connects along the shoulder of the road. While primarily for pedestrians, the Trail also accommodates a variety of additional user groups, such as bicyclists, wheelchair users, equestrians, and others as opportunities allow. The CCT consists of one or more parallel alignments."

The California Coastal Commission has identified the following goals and objectives for the Coastal Trail:

- (1) Provide a continuous walking and hiking trail as close to the ocean as possible;
- (2) Provide maximum access for a variety of non-motorized uses by utilizing parallel trail segments where feasible;
- (3) Maximize connections to existing and proposed local trail systems;
- (4) Ensure that the trail has connections to trailheads, parking areas, transit stops, inland trail segments, etc. at reasonable intervals;
- (5) Maximize ocean views and scenic coastal vistas; and,
- (6) Provide an educational experience where feasible through interpretive programs, kiosks, and other facilities

Figures C-PA-1a-k show the Existing, Planned, and Future alignments of the California Coastal Trail System in the nine SubAreas. Existing means the trail has been constructed. Planned means the approximate location of the trail alignment has been identified as described in the Public Access Plan (**Appendix B**). Future means the alignment between two end points is unknown. In some cases, where the alignment of the Coastal Trail segments has not been identified, the beginning and end points of the trail are shown and the future alignment is illustrated along State Highway 1, although alternative alignments should be considered. The intent of the Local Coastal Plan is to provide a continuous braided trail system that contains parallel routes and point access to accommodate a wide range of users.

Update of Figures C-PA-1a-k of the Public Access Element and the Public Access Plan (**Appendix B**) after dedication of new public and private access facilities shall be accomplished through technical corrections to the Public Access Element and Plan.

Bodega Bay Bicycle and Pedestrian Trail. The 1981 Local Coastal Plan recommended improvements through the town of Bodega Bay to safely accommodate bicyclists and pedestrians, based on community concerns about the inability to walk to various locations in town, particularly as tourism increased. In 2002 the Bodega Bay Bicycle and Pedestrian Trail Advisory Committee was formed comprised of various State and County agencies. After community and Advisory Committee meetings, in 2005 the Sonoma County Transit Agency issued the *Bodega Bay Bicycle and Pedestrian Trails Study, Feasibility Study, and Conceptual Plan*.

The primary objective of the Plan is to find the best route for a separate paved trail to accommodate bicyclists and pedestrians traveling to and through central Bodega Bay. The preferred routes consist of a number of interconnecting trail segments of various types which combined provide alternative routes through central Bodega Bay from the community of Salmon Creek south to the Bodega Harbor subdivision. In 2010 most of the preferred routes were adopted in the County General Plan as part of the update of the County Bikeways Plan. Some of the adopted segments are designated as part of the California Coastal Trail in the Public Access Plan (**Appendix B**).

Waterway Trails. Public access to navigable waterways is protected by the State and Public Trust Doctrine. Navigable waterways support recreational use, are classified as waterway trails, and provide boating and canoeing activities. Support facilities may include designated launch sites, restrooms, parking, and signage. Navigable waterways within the Coastal Zone include all of or portions of the Russian River, Gualala River, Salmon Creek, Bodega Harbor, and Estero Americano.

Other Trails. The *Draft Sonoma County Outdoor Recreation Plan* contains recommendations for other regional trails, some of which are only partially in the Coastal Zone. These recommendations have been incorporated into the Public Access Plan (**Appendix B**).

3.1.3 Coastal Access Trails

Coastal Access Trails, also called vertical accessways, are trails that provide access to the shoreline from roads or other trails. They allow pedestrians, and sometimes equestrians and bicyclists to reach the shoreline. They may have staircases, steps, switchbacks, retaining walls, or other structures to provide safe access.

3.1.4 Bikeways

Bikeways serve both transportation and recreation functions. Bikeways in the Coastal Zone are classified into three classes as defined below. All Class 1 Bikeways in the Coastal Zone included in the *2010 Sonoma County Bikeways Plan* have been incorporated into the Public Access Plan (**Appendix B**). Because Class II and III Bikeways emphasize transportation values, they are described and mapped in the Circulation and Transit Element of the Local Coastal Plan.

Class I Bikeways. Class I Bikeways are also known as multi-use paths. They provide bicycle travel on an all-weather surface within a right-of-way that is for exclusive use by pedestrians and bicyclists. Class I bikeway surfaces must be compliant with provisions of the Americans with Disabilities Act (ADA). These bikeways are intended to provide superior safety, connectivity, and recreational opportunities as compared to facilities that share right-of-way with motor vehicles.

Class II Bikeways. Class II Bikeways are often referred to as bike lanes, and provide a striped and stenciled lane for one-way travel on either side of a street or highway. Unlike Class III Bikeways, Class II Bikeways have to meet specific width and geometric standards.

Class III Bikeways. Class III Bikeways share travel lanes with motor vehicles and are intended to provide continuity to the County bicycle network. They are established along through routes not served by or to connect discontinuous segments of Class I or II Bikeways.

3.2 Facility Acquisition

3.2.1 Methods

Acquiring public access facilities can be accomplished in several ways including fee title purchase, requiring fee or easement dedication as a permit condition, establishing prescriptive rights, donation, and cooperative agreements.

Purchase. Public access can be acquired through fee title purchase or purchase of an access easement. State Parks, Sonoma County Regional Parks, and the Sonoma County Agricultural Preservation and Open Space District (Open Space District) regularly apply for and receive grant funding for property acquisition from numerous sources. Sources of funds can be federal, state, and local agencies, private foundations and non-profit organizations, or a combination. Some agencies which administer acquisition funds that include access as a component are the California Coastal Conservancy (Coastal Conservancy), State Parks, National Parks, National Oceanic and Atmospheric Agency

(NOAA), Wildlife Conservation Board, and the Open Space District. Acquisition may also be accomplished by private organizations such as the Sonoma Land Trust before being deeded to a public agency for development, operations, and maintenance.

Dedication. In order to fulfill the access provisions of the California Coastal Act, the County requires that public access be provided or enhanced as part of new development. When a permit is requested on property with a designated access facility in the general area as described in the Public Access Plan (**Appendix B**), access dedication would be required as a condition of the permit.

The Coastal Act requires for all new development, specifically between the first public road and the ocean shoreline (i.e., west of the first public road), granting of lateral and/or vertical easements to allow for public access along and to the shoreline, coastal bluffs, and other coastal resources.

Section 30212(a). Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where (1) it is inconsistent with the public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Development projects must be sited and designed to either avoid or mitigate all impacts to the public's ability to reach and use tidelands, the shoreline, coastal bluffs, and other coastal resources and facilitate public access to these areas. Where the coastal bluffs exceed five feet, all beach seaward of the base of the bluff shall be dedicated. Where coastal bluffs are less than five feet, the area to be dedicated shall be determined by the County. In no case shall the dedicated easement be required to be closer than 10 feet to an existing or proposed residential structure. In addition, all fences, no trespassing signs, and other obstructions that may limit public lateral access shall be removed as a condition of development approval.

The Coastal Act does not specifically require granting of public access for all new development east of the first public road. However, Coastal Act Sections 30212 and 30604(c) imply public access is required for such development where such development may impede access to any body of water within the Coastal Zone. Section 30212 not only states that public access shall be provided from the nearest public roadway to the ocean, but also between the nearest public road and "the shoreline of any body of water located within the coastal zone", which includes the Russian River and other perennial streams. Therefore, the Coastal Act requires for all new development between

the first public road and any body of water within the Coastal Zone, granting of easements to allow for public access to the shoreline, coastal bluffs, Russian River and other perennial streams, and other coastal resources.

***Section 30604(c).** Every coastal development permit issued for any development between the nearest public road and the sea or the shoreline of any body of water located within the coastal zone shall include a specific finding that such development is in conformity with the public access and public recreation policies of Chapter 3 (commencing with Section 30200).*

Offers to Dedicate. Beginning in 1981, the County has required conditions of approval on Coastal Permits for irrevocable Offers to Dedicate an access easement. Offers to Dedicate are required for future sites when there is no plan to immediately develop access easements for public use. Offers to Dedicate will be evaluated for development at some future time as opportunities arise to link the easements with other public land and trails nearby.

The Coastal Commission's required procedures for Dedication of Access Easements are in California Code of Regulations Title 14, Division 5.5, Section 13574 (Procedures for Open Space Easements and Public Access).

Prescriptive Rights. Section 30211 of the California Coastal Act requires the California Coastal Commission to protect public access when acquired by use. The public may acquire a prescriptive right to use property either by permission of the owner or by using the property without permission. A right of access through use is essentially an easement over real property which comes into being without the explicit consent of the owner. Acquiring such an easement by the public is referred to as an implied dedication or public prescriptive easement. In California, the use must continue for five years before an easement comes into being. If the use meets certain legal criteria, then the historically used area must be kept open for public use in perpetuity.

For the public to obtain an easement by way of implied dedication, it must be shown that the public has used the land for the prescriptive period of five years as if it were public land: 1) without asking for or receiving permission from the owner, 2) with the actual or presumed knowledge of the owner, and 3) without significant objection or bona-fide attempts by the owner to prevent or halt such use.

Prescriptive easements can be established through litigation or Coastal Permit conditions, although proving implied dedication through litigation is a very complex procedure. Prescriptive litigation can be initiated by a public agency or a member of the public.

According to California Coastal Act Section 30211, a permit cannot be issued that might interfere with prescriptive rights. The Public Access Plan (**Appendix B**) identifies access points which may be prescriptive, although research has not been conducted to corroborate this information. The Public Access Plan was developed without prejudice to the existence or absence of prescriptive rights. There may be additional access points that are prescriptive that are not listed in the Public Access Plan.

In addition to the Coastal Act provisions, the Public Trust Doctrine also protects public prescriptive access to navigable waterways within the Coastal Zone.

3.2.2 Acquisition Priority

All proposed accessways in the Public Access Plan (**Appendix B**) have been designated from the highest to lowest priority for acquisition as Acquisition Priority I, II, or III. Acquisition criteria include public safety, quality of destination, bluff stability, distance from other access points, public prescriptive rights, public need, environmental suitability, compatibility with agricultural and residential uses, and ease of development and operation. Some of these criteria conflict; the acquisition priority designations reflect a balancing of all these criteria.

GOAL C-PA-1: **Maximize public access to and along the Sonoma County coast. Minimize adverse impacts from public access to cultural resources, public safety, public health and the environment; and minimize adverse impacts from development on public access.**

Objective C-PA-1.1: Acquire public access to and along the Sonoma County coast through dedication of land, easements, or rights-of-way; fee purchase, or donation.

Objective C-PA-1.2: Acquire public accessways in a distributed network throughout the Sonoma County coast so as not to overburden any one area.

Objective C-PA-1.3: Acquire private accessways through easements and develop them into public accessways.

Objective C-PA-1.4: Prioritize acquiring specific public access facilities within the Sonoma County Coastal Zone.

The following policies shall be used to achieve these objectives:

Land Acquisition Priorities

Policy C-PA-1a: Implement the Public Access Plan as the set of primary policies for acquisition of public access on the Sonoma County coast. (**Existing LCP Revised**)

Policy C-PA-1b: Implement the Acquisition Priorities for the Public Access Plan as follows:

- (1) ***Acquisition Priority I:*** Begin or continue efforts to acquire through purchase, permit requirements, donation, or other negotiations as necessary to implement the Public Access Plan.
- (2) ***Acquisition Priority II:*** Require an offer of dedication or dedication of an easement as a condition of any Coastal Permit.

When all available Priority I properties have been acquired, take positive steps toward acquiring Priority II properties. If a time sensitive Priority II property is available, consider pursuing it before all Priority I properties have been acquired.

- (3) ***Acquisition Priority III:*** Require an offer of dedication or dedication of an easement as a condition of any Coastal Permit. Offers of dedication for some Priority III properties may never be exercised because adequate access is provided by private owners, there is inadequate funding, or it is determined to not be in the public's interest to open access.

When all available Priority I and II properties have been acquired, take steps toward acquiring Priority III properties. If a time sensitive Priority III property is available, consider pursuing it before all Priority I and II properties have been acquired. **(Existing LCP Revised)**

Policy C-PA-1c: Encourage acquisition and development of additional access trails that integrate with the Coastal Trail System where feasible. In the event that an opportunity arises for acquisition of property that is not identified in the Public Access Plan, the agency proposing the acquisition shall conduct an analysis covering the following points:

- (1) The relationship of the unforeseen opportunity to the recreational opportunities identified in the Public Access Plan, including analysis of how the unforeseen acquisition would meet those needs compared to facilities identified in the Plan; and
- (2) An analysis of the opportunity costs of the acquisition, including whether the proposed acquisition is intended to replace or supplement a facility identified in the Public Access Plan. This analysis may consider how the unforeseen opportunity may impact the acquisition of facilities identified in the Plan. **(New)**

Development Review

Policy C-PA-1d: Require dedication of a public access easement, right of way, or fee title as a Condition of Approval for a Coastal Permit for new development requested on property along the alignment of the California Coastal Trail or containing a planned access facility described in the Public Access Plan, for new development located

between the first public road and the shoreline (i.e., west of the first public road); and for any new development located east of the first public road. The dedication shall be reviewed and approved by the Sonoma County Regional Parks Department as sufficient to support the planned public access facility. The dedication shall be granted to the County of Sonoma or a State agency. **(Existing LCP Revised)**

Policy C-PA-1e: Protect areas where public prescriptive rights to the coast may exist by identifying all known routes historically used by the public in the project area when processing Coastal Permits or where public prescriptive rights to the coast appear to be threatened. Work with the California Coastal Commission to ensure that any access rights that the public may have acquired are preserved.

To approve either a permit or Coastal Permits for private development on lands that may have public prescriptive rights to the coast or where these rights appear to be threatened, the following actions must be taken:

- (1) A finding made that the project would not interfere with public prescriptive rights to the coast.
- (2) Formalization of the public prescriptive rights to the coast, which may involve development of new or expanded improvements.
- (3) Dedication of an access easement or fee title as a condition of project approval.

Provide appropriate assistance with State or private legal action to acquire access easements to access corridors for which prescriptive rights to the Sonoma County coast may exist. **(Existing LCP Revised)**

Policy C-PA-1f: Use the California Coastal Commission's *Standards and Recommendations for Accessway Location and Development* (2007) or successor document in siting and locating new or expanded public accessways and other recreation facilities. **(New)**

Determining Access and Recreation Needs

Policy C-PA-1g: Use the Public Access Plan as the guide for determination of undeveloped (passive) park needs in the Coastal Zone, including County Regional Open Space Parks, Regional Trails, and State Parks in order to support coastal recreation. **(New)**

Policy C-PA-1h: Use the following standards for determination of developed (active) park needs: 5 acres of Community Parks, Neighborhood Parks, and Regional Recreation Areas per 1,000 residents in the Coastal Zone. Developed park acreage within private residential areas shall count towards meeting the acreage standard. **(New)**

Maintaining and Managing Public Access

Policy C-PA-1i: Sonoma County shall either accept or assist in finding another public agency to accept Offers of Dedication which increase opportunities for public access to the coast consistent with the County's ability to assume liability and maintenance costs. **(New)**

Policy PA-1j: Encourage owners of fee and non-fee private accessways which provide access to the public to continue to provide access to the public. If a landowner closes an access point to the public, measures to maintain the maximum amount of public access shall be assessed and feasible measures to maintain equivalent access implemented, including but not limited to negotiating an easement. Closures of public access must be consistent with **Policy C-PA-5e. (New)**

Policy C-PA-1k: All Offers to Dedicate easements for public access shall be subject to the procedures in the California Code of Regulations Title 14, Division 5.5, Section 13574 (Procedures for Open Space Easements and Public Access Documents). **(New)**

Policy C-PA-1l: A lateral accessway shall extend from the mean high tide line landward to a defined line, such as the intersection of the sand with the toe of a revetment, vertical face of a seawall, toe of a bluff, or other feature. **(New)**

GOAL C-PA-2: **Create a continuous braided California Coastal Trail system of walking, hiking, and cycling access routes and trailhead connections that maximizes coastal access, ocean views, and educational opportunities while minimizing adverse environmental impacts.**

Objective C-PA-2.3: Identify, prioritize, and develop California Coastal Trail sections as described in the Public Access Plan.

Objective C-PA-2.4: Provide a safe, continuous walking and hiking trail as close to the ocean as possible.

Objective C-PA-2.5: Provide maximum access to the California Coastal Trail for a variety of non-motorized uses by using alternative trail segments where feasible.

Objective C-PA-2.6: Maximize connections to existing and proposed regional and local trail systems.

Objective C-PA-2.7: Ensure the California Coastal Trail has connections to trailheads, parking areas, interpretive kiosks, and inland trail segments at reasonable intervals.

Objective C-PA-2.8: Maximize ocean views and scenic coastal vistas from the California Coastal Trail where possible.

Objective C-PA-2.9: Provide an educational experience through interpretive facilities where feasible.

The following policies shall be used to achieve these objectives:

Trail Location and Alignment

Policy C-PA-2a: Provide a safe, continuous walking and hiking trail as close to the ocean as possible. Where it is not feasible to locate the trail along the shoreline due to natural landforms or legally authorized development that prevents passage at all times, inland bypass trail segments located as close to the shoreline as possible should be used. Shoreline trail segments that may not be passable at all times, or that are not passable by bicycles, should be augmented by inland alternative routes that are passable and safe for pedestrians and bicycles. **(New)**

Policy C-PA-2b: Where gaps in a continuous alignment are identified, employ interim trail alignments to ensure continuity of the California Coastal Trail. Interim segments should be noted as such, with provisions that as opportunities arise, the trail shall be realigned to its optimum location. Interim segments should meet as many of the California Coastal Trail objectives and standards as possible. **(New)**

Policy C-PA-2c: Avoid locating the California Coastal Trail along or on roads with motorized traffic where feasible. In locations where it is not possible to avoid siting the trail along or on a roadway, the trail should be located off of the pavement, and separated from traffic by a safe distance or by physical barriers that do not obstruct, or detract from, the scenic views and visual character of their surroundings. In locations where the trail must cross a roadway, safe under- or over-crossings or other alternative at-grade crossings should be considered in connection with appropriate directional and traffic warning signage. **(New)**

Policy C-PA-2d: The California Coastal Trail should use existing oceanfront trails and recreational support facilities to the maximum extent feasible. **(New)**

Trail Design and Construction

Policy C-PA-2e: Provide adequate parking and trailhead facilities for the California Coastal Trail. Consider public safety concerns and use patterns including the proximity of other nearby parking and trailhead facilities when determining locations. **(New)**

Policy C-PA-2f: Provide low cost overnight facilities at periodic intervals along the California Coastal Trail corridor to support long term hiking and cycling excursions. **(New)**

Policy C-PA-2g: The Coastal Trail should be designed and located to minimize impacts to environmentally sensitive habitat areas to the maximum extent feasible. Where necessary to prevent disturbance to sensitive species, sections of the trail may be closed on a seasonal basis. Alternative trail segments shall be provided where feasible. For situations where impact avoidance is not feasible, appropriate mitigation measures should be incorporated, including but not limited to, use of boardwalks, reducing trail width and protective fencing. **(New)**

Policy C-PA-2h: The Coastal Trail should be designed to maximize compatibility with agricultural lands and uses. **(New)**

Policy C-PA-2i: Require construction of California Coastal Trail segments as conditions of approval for coastal development along the alignment involving other new or major replacement infrastructure, such as realignment of Highway 1. **(New)**

3.3 Facility Planning and Development

3.3.1 Public Access Plan

The Public Access Plan in **Appendix B** encompasses recommendations from the previous Local Coastal Plan; and State Parks and County Regional Parks General Plans, Master Plans, and Management Plans; and has been supplemented with agency and public input. State Parks and County Regional Parks are required to prepare General Plans or Master Plans for facility development. Other public and private resource lands sometimes have Management Plans containing a public access component. While facility Master Plans are beyond the scope of the Local Coastal Plan, the policies included in the Public Access Plan establish a framework for facility planning on the Sonoma County coast by the appropriate State and County agencies, as well as a framework for private recreational facility providers. This framework recommends areas for a particular type and scale of potential recreational development consistent with the mandates of the California Coastal Act. Some of the State General Plans and County Master Plans need updating due to expansions, changed conditions, and new regulations. The General Plan for the Sonoma Coast State Park was most recently updated in 2007, but many other plans date back to the 1970s and 1980s.

Many standards and policies inform the Public Access Plan, including those in the Local Coastal Plan and General Plan policies for equitable distribution of recreational facilities. Site planning standards include those associated with any publicly accessible facility, such as state and federal disabled accessibility regulations, building codes, fire codes, traffic and safety codes, and environmental regulations. Public Access Plans are based on local and regional needs. Because of the exceptional quality and significance of its

natural resources on a local, state, and national level, the Coastal Zone contains a greater proportion of the resource-based recreational facilities and opportunities than found in other areas of Sonoma County. Therefore, the equitable distribution of recreational opportunities and facilities along and between the North and South Coasts is a goal for State Parks and County Regional Parks reflected in the Public Access Plan. The equitable distribution of recreational facilities is influenced less by resident population densities and more by providing the entire County population with a range of recreational experiences without overly impacting any one access area too much.

State Facilities. The proposed improvements and programs for State facilities identified in the Public Access Plan are driven by a series of California Department of Parks and Recreation programs and planning documents. Criteria for access improvements, along with the involvement of natural and cultural resources, are provided through Division 5 of the State of California Public Resources Code and the California Department of Parks and Recreation's Operations Manual. Recommendations for access improvements to meet accessibility guidelines are mandated through the Consent Decree from *Tucker v. The State of California Department of Parks and Recreation*. Proposals for specific State facilities are identified based on the need to provide safe and quality public access to facilities and protect park resources.

The California Department of Parks and Recreation has determined the General Plans for Salt Point State Park (1976) and Fort Ross State Historic Park (1975) need to be updated. The proposed improvements and programs for these two Parks in the Public Access Plan are based on this determination. The California Coastal Trail Project and Mitigated Negative Declaration (2011) are the source of proposed improvements and programs related to the California Coastal Trail and associated facilities in the Public Access Plan.

Proposals identified for Sonoma Coast State Park are an outgrowth of guidance provided in the Sonoma Coast State Park General Plan (2004). Proposals associated with the Carrington Property are contained in the Carrington Property Immediate Public Use Facilities Plan (2008, rev. 2010) and subsequent Mitigated Negative Declaration (2010).

The proposed improvements for County Regional Parks facilities identified in the Public Access Plan were based on the considerations and standards described below under Planning and Development Considerations.

3.3.2 Planning and Development Considerations

Need and Demand. The need for public access facilities in the Coastal Zone depends on the facility classification. The need for facilities that support active recreation are determined by the applicable acreage per capita standard. Because the residential population within the Coastal Zone is small, and the acreage requirements for active recreation are adequate. The facility needs for passive recreation, coastal access, and accessible resource areas is determined by the Public Access Plan and the qualitative policies in this Element. The need for these facilities is influenced by the demand from local and regional visitors, as well as ecological and scenic considerations.

At times the demand for recreational facilities, particularly campsites, exceeds the supply on the Sonoma County coast. The Local Coastal Plan recommends a level of overnight accommodations, including camping, that is within State Highway 1 capacity constraints and is consistent with protecting coastal resources and providing a quality coastal experience.

Facility Improvements. Each facility will have an adopted long-range plan or Master Plan that identifies and describes the location of the various improvements. Necessary facilities at a particular site depend on the expected use and the availability of facilities nearby. Because the level of use is expected to increase over time, facilities may be developed in several phases with new or expanded facilities added as needed. Among the facilities needed for public access and outdoor recreation destinations are: safe trails, restrooms, parking areas, trash receptacles, and signs.

Quality of Destination. The desirability and capacity of coastal destinations are important considerations in locating public access points. Areas with few attractions and limited space may not justify the cost of development and operation. However, as the population expands and overuse impacts the existing destinations, the importance of every potential public access point increases.

Impacts on Environment. The environmental carrying capacity, protection of wildlife habitat, protection of views, and the psychological and social capacity of recreational lands are important factors to consider in planning and developing recreational facilities. Quantifying and measuring recreational carrying capacity is difficult and each site is unique.

The Local Coastal Plan generally supports distributing recreational facilities where compatible with the sensitivity and suitability of an area. Distributing recreational facilities throughout the Sonoma County coast helps prevent overuse and damage to the coastal environment in any one location. Often it is most efficient to utilize existing

park service centers and consolidate significant developed park infrastructure to support the facilities. The existing park service centers are well-situated to serve additional dispersed recreation.

In planning for recreational activities, substantial modifications of the natural environment for a specific activity should be minimized and avoided if possible. The Coastal Act specifies that coastal dependent uses permitted on the coast have priority over non-coastal dependent recreational uses. While oceanfront sites enhance coastal facilities such as hotels, restaurants, and campgrounds, such locations may affect important coastal views from the highway and adjacent recreation areas.

Development of park facilities must also include consideration of water supply and wastewater disposal. As the Sonoma County coast is a water scarce area, all facility planning should include an early evaluation of water supply capability if water is required to support the development.

Peak Use. Peak use issues can be addressed through a variety of approaches. Visitors can be encouraged to use Sonoma County Transit, Mendocino County Transit, and other alternative transportation, reducing the need for new parking areas (see California Coastal Act Section 30252.1). Interpretive materials and programs can be provided to help connect visitors with access points they may not have known about. Lightly used locations such as Short Tail Gulch or Bodega Dunes Beach can be developed near heavily used locations such as Doran Beach or Salmon Creek Beach. A continuous California Coastal Trail that connects multiple access points allows visitors to park wherever parking is available and use the trail to reach their preferred access point. Heavy use at particular access points can be distributed by creating additional trails with coastal views on parkland east of State Highway 1. The Dr. Joseph Trail (Pomo Trail) is a good illustration of a popular trail with coastal views east of the highway. Measures to address use patterns at specific access points are in the Public Access Plan.

Parking. Parking along State Highway 1 is primarily for pursuing outdoor recreation. Parking management influences the capacity of Highway 1 since visitors slow down while searching for parking spaces and the numerous parking lots and turnouts tend to slow traffic. Between Bodega Bay and Jenner, State Highway 1 is adjacent to the Sonoma Coast State Beaches. Roadside parking in this area is heavy and often supported by paved, striped parking lots. North of Jenner Russian Gulch and Vista Trail provide the only off road parking, although there are numerous small turnouts. Further north, Fort Ross State Historic Park, Stillwater Cove Regional Park, and Salt Point State Park provide some off-highway parking for developed park areas only. Gualala Point Regional Park and The Sea Ranch Coastal Access Trails all have off-highway parking.

Parking improvements needed on the Sonoma County coast include developing new and enlarging existing parking facilities to reduce hazardous parallel parking, improving signs and entrances to and exits from parking facilities, and increasing capacity by delineating parking spaces. Parking improvements are most needed in the Sonoma Coast State Park area between Bodega Bay and North Jenner Beach, where traffic levels and demand for parking spaces are greatest. The Public Access Plan recommends parking improvements for various access points.

Residential Conflicts. Access facilities must be designed and managed to minimize conflicts with residential development. The distance between coastal access trails and residences should be as large as possible to protect the quality of the user experience and the privacy of the occupants of the residence.

Liability. Liability is a concern of both public agencies and private property owners regarding public access. State laws do provide some immunity from liability. California Government Code Sections 831.2 and 831.4 provide immunity to public agencies for public recreational use of public lands and recreational trails and roadways, releasing agencies from liability if a person is injured while using the facility. California Civil Code Section 846 grants immunity to private landowners who allow people to use their property for recreational purposes. However, if a fee is collected the private landowner loses this immunity.

Coastal Permit Findings. The County will approve a Coastal Permit for new development if it finds that the development, as described in the application and as conditioned, conforms with the plans, policies, requirements, and standards of the Sonoma County Local Coastal Program.

The California Coastal Act requires that every coastal development permit issued for new development located between the nearest public road and the sea (i.e., west of State Highway 1) or the shoreline of any body of water located within the Coastal Zone include a specific finding that such development is in conformance with the public access and public recreation policies of Chapter 3 of the Coastal Act. This policy does not apply to types of development not considered new development, as outlined in Coastal Act Section 30212.

If the new development is in conformance with the Public Access Plan of the Local Coastal Plan, this access requirement is met since the Public Access Plan is certified as being in conformance with access requirements of the Coastal Act. If the new development is not in conformance with the Public Access Plan, public access from the nearest public roadway to the shoreline and along the coast (i.e., granting of an

easement to allow vertical access to the mean high tide line or lateral access) shall be provided on the project site with the following exceptions:

- (1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources; or
- (2) Adequate access exists nearby; or
- (3) It would have a significant adverse impact on agriculture as determined by the California Coastal Commission (Coastal Act Section 30212).

Regarding the first exception, there are few locations along the Sonoma County coast for which the Public Access Plan does not include recommendations for new or improved public access due to public safety hazards. In other areas the County requires construction of improvements along with the public access to reduce public safety hazards to a level of less than significant.

Beach trail routes may pose public safety hazards from inundation during high tides; engulfment by sleeper waves; loss of balance and sweeping out to deep water resulting from ocean backwash, sudden drop-offs at the surf line, or rip currents; and loss of balance and falling from crumbly, unstable bluffs and rock outcroppings. These public safety risks are greater where the beach is relatively narrow and rocky, where the route along the beach may only be safe during a low tide. Where a beach route of the California Coastal Trail is unsafe at certain times of the day or year, the County will designate an alternative route for the California Coastal Trail, creating a braided trail.

The County has evaluated most of the potential public access areas for conflicts with agricultural uses, Environmentally Sensitive Habitat Areas, and cultural resources; and eliminated some of these areas from the Public Access Plan due to the inability to mitigate impacts on these resources.

Prior to development of public access further environmental studies are necessary. These studies may show that public access can be developed with adequate mitigation measures which may include siting the access to avoid sensitive resources, constructing boardwalks and stairways over or around sensitive resources, periodically closing areas to allow for revegetation, limiting access to scientific and nature study, or restricting access to certain seasons or times of the year.

However, in cases in which public safety hazards or impacts on sensitive resources cannot be mitigated or when public access is not appropriate, alternative public access should be required for new development, including development of off-site public access points. If off-site public access points are developed as mitigation for the impact

of new development on public access, these access points should be as close as feasible to the location of the impact on public access.

Regarding the second exception, adequate public access has not been defined or quantified, and the availability of access is constrained by many factors, including adjacent land uses; sensitive resources; topography; and the ability of public agencies to develop, operate, and maintain public access. County staff assigned to the new development project, in consultation with State Parks or County Regional Parks, would determine if any nearby public access is adequate based on knowledge of the issues associated with access, characteristics of the existing access, experience with other Coastal Permits, performance standards for adequate access, and any applicable County and California Coastal Commission policy. Sonoma County Regional Parks performance standards for adequate public access take into account the current and projected demand, state of the economy, adequacy of existing parking, extent of coastline involved, need and policy for a continuous California Coastal Trail, and adequacy of existing facilities for the disabled.

Regarding the third exception, a public accessway should not be sited on land used for agriculture unless adequate protection of the agricultural uses is provided. The Coastal Commission would determine if the potential adverse impacts on agriculture from public access for the new development would be significant. If significant, mitigation measures are available to reduce the impacts to a less than significant level, including restricting access to certain seasons or times of the year, locating access along fences and property lines, establishing a natural or artificial physical separation between the agricultural activities and access area, and locating the public access on another site or property.

GOAL C-PA-3: **Maximize public access to and along the Sonoma County coast. Minimize adverse impacts from public access on people and the environment; and minimize adverse impacts from development on public access. (New)**

Objective C-PA-3.1: Maintain and enhance public access to and along the Sonoma County coast.

Objective C-PA-3.2: Provide adequate facilities at public accessways.

Objective C-PA-3.3: Develop and maintain public accessways so as to protect public health and safety, protect sensitive visual and natural resources, and prevent adverse impacts on adjacent properties.

Objective PA-3.4: Ensure that development does not adversely affect existing and potential public accessways.

Objective PA-3.5: Prioritize development of specific public accessways.

Objective PA-3.6: Provide enough camping to meet the latent demand, and to provide a range of camping experiences.

The following policies shall be used to achieve these objectives:

Public Access Development Priorities

Policy C-PA-3a: Implement the Public Access Plan as the set of primary policies for development of public access on the Sonoma County coast. **(Existing LCP Revised)**

Policy C-PA-3b: All proposed public access in the Public Access Plan has been designated from the highest to lowest priority for development as Development Priority I, II, or III. The emphasis for development priority is different than that for acquisition priority. Developing accessways distant from existing developed access points are given higher priority. Public safety and the costs of development and operation are principal concerns.

Implement the Development Priorities for the Public Access Plan as follows:

- (1) **Development Priority I:** Encourage each agency or entity owning or operating designated public access facilities to prioritize available funds towards developing Priority I public access facilities within their purview;
- (2) **Development Priority II:** Encourage each agency or entity owning or operating designated public access facilities to prioritize available funds towards developing Priority II public access facilities only when all Priority I public access facilities within their purview have been developed or if funding specific to a site becomes available; or
- (3) **Development Priority III:** Encourage each agency or entity owning or operating designated public access facilities to prioritize available funds towards developing Priority III public access facilities only when all Priority I and II public access facilities within their purview have been developed. **(Existing LCP Revised)**

Development Review

Policy C-PA-3c: Consider alternative mitigation measures for the impact of new development on public access in cases where development of certain public access facilities or improvements are found to be infeasible due to potentially significant impacts on public safety, agriculture, Environmentally Sensitive Habitat Areas, or cultural resources. Alternative mitigation measures include but are not limited to development of off-site public access points of equivalent public access opportunities. If off-site public access points are developed as mitigation for the impact of new development on public access, these access points shall be as close as feasible to the location of the impact on public access. Feasible is defined here as "capable of being

accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.” **(New)**

Policy C-PA-3d: Require a Coastal Permit for all new public or private access facilities. **(Existing LCP Revised)**

Policy C-PA-3e: Conduct public hearings for review of the Coastal Permits for an existing coastal access trail if there is evidence of degradation of resources in the area of the facility or significant public interest in the facility. Any proposal to reduce or close an existing public coastal access point or trail as a result of such review shall be reviewed by the California Coastal Commission. **(Existing LCP Revised)**

Policy C-PA-3f: Use the *California Coastal Commission’s Standards and Recommendations for Accessway Location and Development (2007)* or successor document in designing and constructing new or expanded public access facilities and other recreation facilities where appropriate. **(Existing LCP Revised)**

Policy C-PA-3g: Conduct visual analysis prior to siting parking areas for accessways. **(Existing LCP Revised)**

Policy C-PA-3h: Encourage a range of accommodations in parks, including the provision of low cost accommodations where appropriate, including tent or small vehicle campgrounds, hike-in and primitive campgrounds, and hostel and sleeping cabin facilities. Use existing buildings and structures for these accommodations where feasible. **(Existing LCP Revised)**

Policy C-PA-3i: Locate campgrounds, whenever possible, in areas that have already been disturbed by prior uses and consequently where cultural and biotic resources are typically limited. Campgrounds should be sited in a manner that protects visual resources and consistent with County development standards. Provide separate walk-in, tent, and recreational vehicle camping areas. **(Existing LCP Revised)**

Policy C-PA-3j: Relate intensity of planned public access facilities to available water supply and available septic or sewer capacity. **(Existing LCP Revised)**

Policy C-PA-3k: Allow park residences in areas visible to the public where necessary for security reasons and when impacts on views are mitigated. **(Existing LCP Revised)**

Policy C-PA-3l: Allow extension of sewer service to parklands only where consistent with policies of the Public Facilities and Services Element of this Local Coastal Plan. **(Existing LCP Revised)**

Public Access Facilities

Policy C-PA-3m: Provide safe and clear public access trails. The trail surface could be dirt, gravel, paved, or a stairway. Improvements should be designed to be safe, minimize impacts to sensitive resources, minimize maintenance costs, and provide disabled accessibility to the extent feasible without substantially impacting sensitive resources. **(New)**

Policy C-PA-3n: Provide restrooms at significant recreational areas to protect coastal resources and public health and safety. Consider use patterns and the proximity of other nearby public restrooms when determining facility needs. **(Existing LCP Revised)**

Policy C-PA-3o: Provide trash and recycling receptacles and their servicing at all major public access facilities. **(New)**

Policy C-PA-3p: Encourage the California Department of Parks and Recreation to install emergency communication facilities at Goat Rock. **(New)**

Policy C-PA-3q: Provide clear directional signs at all public access facilities to indicate the location of trail heads and public parking. If the trail begins on State Highway 1, only one directional sign on the highway is necessary. Signs shall be compatible with surrounding views and visual resources, consistent with County Visual Resource Assessment Guidelines. If the trail begins off the highway, there should be a directional sign on State Highway 1 and other directional signs to the trail head. **(New)**

Policy C-PA-3r: At trailheads provide information about regulations, contacts in case of an emergency, natural resources, the potential for fires, and the need for user cooperation. **(New)**

Policy C-PA-3s: Provide bicycle racks or locked bicycle storage areas at State and County Regional Parks, beaches, and other developed parklands. **(Existing LCP Revised)**

GOAL C-PA-4: **Establish a parking system with adequate parking facilities for parkland visitors throughout the Sonoma County coast, with minimal impacts on views, public safety, and natural resources.**

Objective C-PA-4.1: Ensure that adequate parking facilities are provided for each new or expanded public access facility.

Objective C-PA-4.2: Identify, prioritize, and implement parking improvements at parklands.

The following policies, in addition to policies in the Circulation and Transit Element, shall be used to achieve these objectives:

Locating and Developing Parking Improvements

Policy C-PA-4a: Encourage new parking facilities in conjunction with development of new public access facilities. Parking may be developed in phases as use levels increase. At public access facilities, provide the maximum parking capacity that does not reduce public safety or significantly impact the environment. **(New)**

Policy C-PA-4b: Locate parking areas to directly connect with trails if possible. In locating new, large parking lots, consider the landward (east) side of State Highway 1 to reduce impacts to ocean views if safe trail crossings of the highway can be provided. **(New)**

Policy C-PA-4c: When feasible locate parking in areas screened from public view. **(Existing LCP Revised)**

Facilitate Access for All

Policy C-PA-4d: Maintain and provide free parking, subject to reasonable restrictions, at all public access points on the coast which do not contain special facilities in excess of restrooms, parking, gated access, trash enclosures, informational kiosks, and other minor amenities. If user fees are implemented for any coastal park areas, encourage discounts to County residents. **(New GP2020 Revised)**

Temporary Events on Public Beaches

Policy C-PA-4e: Until completion of **Program C-PA-3** continue to apply zoning permit standards for temporary private events on public beaches that do not involve structures or other coastal development. **(New)**

3.4 Recreation Facility Management and Operation

Public outdoor recreation facilities must be managed. An agency or organization must be willing to accept responsibility for maintaining and operating the facility before it is opened to the public. Three types of operators may manage outdoor recreation facilities: public agencies, organizations, and private individuals. Appropriate public agencies include State Parks, County Regional Parks, and California Department of Fish and Wildlife. The County would give preference to public agencies for accepting and operating facilities. If it is not feasible for a public agency to accept a particular facility, an organization may do so after a public hearing has been conducted.

In some cases, the managing entity is different than the property owner. For example, State Parks has an agreement with County Regional Parks to operate several parcels adjacent to Stillwater Cove Regional Park on the north. This is because these parcels are close to the County Park facility. Other possibilities are public ownership of a facility which is leased back to a private party for operation, and ownership and operation of a public access facility by a private owner such as a business or non-profit group.

Park operations include opening and closing gates, visitor centers, restrooms, patrolling and responding to emergencies, servicing the trash and recycling receptacles, collection of authorized fees, and staffing campgrounds.

3.4.1 Allowable Activities

Allowable activities at coastal access facilities are governed by easement or deed conditions and the general plan or master plan for the specific facility. Allowable uses are often specified and typically in passive use areas, recreational uses allowed within the accessway include activities normally associated with beach use (walking, swimming, jogging, sunbathing, fishing, and nature study) but do not include organized sports activities, campfires, or vehicular access.

3.4.2 Funding

The funding for the operation and maintenance of public park facilities can be difficult for public agencies and private businesses and nonprofits to support during challenging economic times. Because of the numerous access points to existing facilities, temporary closures are often ineffective at preventing access to facilities and can cause additional issues.

3.4.3 Maintenance

Properly maintaining access facilities is essential to protect natural resources and public safety and to prevent adverse impacts on adjacent properties. Coastal Permit conditions and renewals help ensure that maintenance is adequate.

3.4.4 Policing

Policing of recreational facilities is provided by the operating agency or private organization. The two public agencies that police most of the public recreational facilities on the Sonoma County coast are State Parks and County Regional Parks. In addition, the California Highway Patrol, State Department of Fish & Game, and County Sheriff play an important role. Current staffing levels for public agencies and many private organizations is limited.

3.4.5 Private Fee Access

A few landowners charge minimal day use access fees that permit the general public the opportunity to reach the shoreline. By controlling access by fee and location, the property owner can operate trails, parking, and boat launching in a manner that affords minimum interference with other land uses. Unfortunately, several of these access points have been closed. The Public Access Plan encourages owners of fee accessways to continue to provide access to the public. Private fee accessways require a Coastal Permit and can be subject to sanitary, parking, and other conditions similar to those applied to public accessways.

GOAL C-PA-5: **Public access facilities are operated and maintained to protect natural resources and public safety and to prevent adverse impacts on adjacent properties.**

Objective C-PA-5.1: Require that the public access facilities are properly operated and adequately maintained to maximize public access.

The following policies shall be used to achieve these objectives:

Public Access and Recreation Planning

Policy C-PA-5a: California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) environmental analyses on proposed State Parks or County Regional Parks projects shall include estimates of current and future visitor use and analyses of adequacy of the proposed facilities to meet county-wide visitor demand. **(New)**

Policy C-PA-5b: Planning for new, expanded, or improved State Park and County Regional Park facilities shall take into consideration the balance of distribution of facilities between the North Coast and South Coast. **(New)**

Public Access and Recreation Operations and Maintenance

Policy C-PA-5c: When new recreation facilities are proposed, assess proposed staffing plans to ensure adequate staffing for maintenance and security. **(New)**

Policy C-PA-5d: Use Coastal Permit conditions and renewals to ensure that recreation and access facilities are properly maintained to protect natural resources and public safety and to minimize adverse impacts on adjacent properties. **(New)**

Public Access Facility Closures

Policy C-PA-5e: The following guidelines shall be applied to closures of public access facilities:

- (1) A beach closure or curfew cannot apply to the area of original jurisdiction of the California Coastal Commission (State tidelands, submerged lands, and public trust lands), including but not necessarily limited to the area seaward of the mean high tide line.
- (2) Public access to the water's edge and at least 20 feet inland of the wetted substrate (sand and rocks) of all beaches shall be permitted at all times.
- (3) Closure to public use of any portion of the beach inland of the mean high tide line is not encouraged, and would require a coastal development permit, a condition of which must include maintenance of the public's right to gain access to State tidelands.
- (4) Measures that limit public use of the beach shall be limited to those necessary to address documented events that could create a risk or hazard to public safety of the environment, and shall be the minimum necessary to address that potential risk or hazard. The need for continuation of measures that provide public safety but that limit public access to the beach shall be reassessed on a periodic basis to assure maximum feasible public access to the beach is provided. (New)

4. RECREATIONAL BOATING POLICY

The 1981 Local Coastal Plan had a separate Harbors chapter. The recreational boating section of that chapter has been incorporated into this Public Access Element. The California Coastal Act of 1976 supports coastal-dependent development stressing protection of recreational boating and necessary support facilities.

While Bodega Harbor is known primarily for its commercial boating, recreational boating is also important at the harbor. Approximately 11,000 boats annually use the launch facilities at Doran County Park and Westside County Park. An additional 350 sailing boats use Bodega Bay as a port of refuge. On a typical summer weekend two to four hundred recreational boats use the facilities at Bodega Bay. The demand for camping facilities, groceries, bait, fuel, mechanical repairs, and berth space in the private marinas is considerable during this time. Since facilities are limited, the needs of the recreational boater must be balanced against those of the commercial boater. Berths for recreational boats have been expanded and limited support facilities have been constructed at Spud Point Marina, which contains 253 total berths, a fuel dock, waste pump-out station, service dock, laundromat, and restrooms with showers. In 2015, commercial boats used roughly 40 percent of the berths, and recreational boats used about 60 percent of the berths. However, during the busier salmon and crab season, commercial boat activity increases at the marina.

The mosquito fleet is a collection of small boats (18 to 30 feet) with commercial licenses at Bodega Bay. Owners range from part-time sport fishermen to serious full-time commercial fishermen. Most of these boats are moored or anchored. While these boats are not strictly recreational, they demand similar support facilities.

Recreational boating outside of Bodega Bay includes vessels used in abalone diving, canoes, small power boats, and sailboats on the Russian River; inflatable rafts and other hand launched vessels; recreational fishing boats launched on the North Coast; and occasional canoes and kayaks on the Estero Americano. Ramp launching facilities on the Sonoma County coast are limited. Hand launching opportunities are numerous but not usually supported by adequate parking, restroom, and shower facilities. Boat rentals are sometimes available on the Russian River and North Coast.

GOAL C-PA-6: Provide adequate recreational boating facilities at parks, harbors, and marinas on the Sonoma County coast.

Objective C-PA-6.1: Identify and develop the recreational boating facilities needed at parks, harbors, and marinas.

Objective C-PA-6.2: Develop a sustainable economic approach to support the boating facilities in Bodega Bay.

The following policies, in addition to those of the Land Use Element, shall be used to achieve these objectives:

Policy C-PA-6a: Encourage public and private harbor and marina operators to accommodate existing and future demand for recreational and commercial boating facilities. **(New)**

Policy C-PA-6b: Encourage continuing the existing boat rental and launch facilities at the coast and coastal waterways and providing additional facilities that provide new recreational opportunities compatible with natural resources. **(New)**

Policy C-PA-6c: Provide the maximum public access feasible to new boat wharves and piers. **(New)**

Policy C-PA-6d: Encourage the establishment of waterway trails for non-motorized boating to promote environmentally sensitive water based education, recreation, and tourism. Provide information at launch sites for safe and responsible boating. **(New)**

5. IMPLEMENTATION PROGRAMS

5.1 Public Access Programs

Program C-PA-1: Prepare a long-range plan or Master Plan for each State or County Park or Preserve consistent with priorities in the Public Access Element in conjunction with park development planning. **(Existing LCP Revised)**

Program C-PA-2: Encourage the provision of transit, bicycle and pedestrian pathways, and other vehicle use reduction measures to reduce vehicle use to and between public and private access facilities on the coast to reduce the number of vehicles on State Highway 1 and the demand for parking spaces. **(New)**

Program C-PA-3: Consider developing policies for review of applications for temporary private events on a public beach that consider: public or private use; type of associated coastal-dependent activities; displacement of public use; number of people; season, weekday or weekend, and hours; location and area relative to size of beach and public accessways; pedestrian access; transportation and parking; amplified music and other noise; equipment; temporary structures and enclosures; food service; warming fires; signage; admission fee; wastewater and solid waste disposal; and required mitigation measures. **(New)**

Program C-PA-4: Evaluate the feasibility of a Bodega Bay water taxi to connect existing recreational and commercial facilities and reduce automobile congestion. **(New)**

5.2 Other Initiatives

Other Initiative C-PA-1: Encourage partnerships between public agencies and private organizations that maximize the efficiency of operating and maintaining public facilities and preventing public access facility closures. **(New)**

Other Initiative C-PA-2: Work with Regional Parks to evaluate the reuse of Mason's Marina to concentrate the County's marina services and to support other boating related uses. **(New)**

Other Initiative C-PA-3: Encourage the formation of a harbor district at Bodega Bay to improve recreational and commercial boating. The harbor district could facilitate the economic basis for providing improved boating facilities and public outreach. **(New)**

PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

WATER RESOURCES ELEMENT September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
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WATER RESOURCES ELEMENT

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WATER RESOURCES ELEMENT

1. INTRODUCTION

1.1 Purpose

Water is an essential element of all life forms. Plants and animals are mostly composed of water and need water and the nutrients carried by water. An adequate and high quality water supply is therefore required for continued human survival, development and use of the land, and the health of the entire natural environment.

Due to its critical importance as a legislatively recognized public resource and basic human right, the use and quality of water have long been regulated by government. Since water moves easily across city and county boundaries, regulation typically occurs at the regional, State, and Federal levels. However, since cities and counties have legal authority over development and land use, they are involved in considering the adequacy of water supplies and how development affects the quantity and quality of water available for other beneficial uses.

As development has continued, the long-term adequacy of groundwater and surface water resources has become a major public concern. Water-related issues include lowered groundwater levels, increased stormwater runoff, sediment and pollutants in runoff, water diversions into and out of the Russian River basin, summer rationing in dry years, fish and wildlife water needs, the rates of water use, conservation methods, water storage limitations, the growing re-use of water, and continuing changes in State and Federal regulations. While much is known about groundwater and surface water conditions in Sonoma County's Coastal Zone, addressing these evolving issues will require a continued and iterative process data collection, problem identification, and development of adaptive management strategies.

The primary purpose of this Element, an optional Element to the Sonoma County Local Coastal Plan, is to ensure that coastal water resources are sustained and protected. To achieve this purpose, water resource management should consider the amount of quality water that can be used over the long-term without exceeding the replenishment rates over time or causing long-term declines or degradation in available surface water or groundwater resources. The Water Resources Element establishes goals, objectives, and policies to protect and sustainably manage coastal water resources. Programs needed to implement proposed policies are also identified. In addition, the Element calls out ongoing or potential future County initiatives, referred to as "Other Initiatives", that

support public safety and promote inter-agency and community collaboration. Nothing in this Element should be construed to encourage or condone illegal use of water.

1.2 Relationship to Other Elements

The Water Resources Element addresses a range of water related issues in the Sonoma County Coastal Zone. Some other water-related topics are also addressed in other Elements. Water availability as a factor in Land Use Map densities is addressed in the Land Use Element. The Open Space and Resource Conservation Element addresses riparian corridors, wetlands, wildlife protection, tree protection, fishery resources and other biotic resources, soil erosion, forestry, and mineral resources. The Public Access Element addresses water oriented recreation. The Public Facilities and Services Element addresses connections to public water systems. The Public Safety Element addresses flood hazards, fire suppression, and hazardous materials. The Agricultural Resources Element addresses aquaculture.

The Water Resources Element has been developed to be consistent with other Elements. References to policies in other Elements are provided where they support or implement the objectives of the Water Resources Element.

1.3 Scope and Organization

The Water Resources Element is organized as follows. Section 2 reviews the relevant water rights law, the hydrologic system, the major streams and drainage basins, the role of vegetation in the water cycle, and the natural underground water storage in the County. Section 3 states the County's goals, objectives, and policies for each of the six topics.

2. WATER RESOURCES AND REGULATION

2.1 Water Cycle

In Sonoma County, the hydrologic cycle of water is dominated by the frequent inflow of moisture-laden air from over the Pacific Ocean. As the moisture laden air cools, particularly where it is forced higher by steep slopes, the vapor condenses into water that falls as rain or, if the vapor is chilled enough, it forms solid ice crystals and falls as snow. Most of the rain and snowmelt runs off into surface water bodies that drain back to the sea. Some of the precipitation is absorbed into the Earth and becomes groundwater, some of which moves slowly through subsurface layers to streams, lakes, and the ocean. When the sun heats surface water, it evaporates and again becomes potential precipitation.

The range of temperatures, cloud cover, and moisture and evaporation levels, when combined with the effects of topography, vegetation, and development, can result in varying rainfall levels at any particular time in each of the watersheds in the County. In addition, long-term changes in snowpack and precipitation related to climate change could alter precipitation patterns, the regional availability and temperature of water, surface runoff, and sea level elevation.

2.2 Watersheds

The term watershed refers to the area of land that includes a particular river or lake and all the rivers, streams, and creeks that flow into it. Most land in Sonoma County falls within the three main watersheds: Russian River, Gualala River, and San Pablo Bay. **Table C-WR-1** and **Figures C-WR-1a-c** show the areas and locations, respectively, of the Watersheds and Sub-watersheds of the Sonoma County Coastal Zone, which lay both inside and outside Sonoma County.

Table C-WR-1: Area of Watersheds and Sub-Watersheds of the Sonoma County Coastal Zone

Watershed	Sub-Watershed	Total Area (square miles)	Area Within Coastal Zone (square miles)
Abbotts Lagoon-Frontal Pacific Ocean		107	<1
Gualala River		299	2
	South Fork Gualala River	44	2
Lower Russian River		148	15
	Dutch Bill Creek-Russian River	55	<1
	Willow Creek-Russian River	24	15
Salmon Creek-Frontal Pacific Ocean		256	52
	Bodega Harbor-Frontal Pacific Ocean	55	11
	Russian Gulch-Frontal Pacific Ocean	166	36
	Salmon Creek	35	4
Tomaes Bay-Bodega Bay		160	17
	Bodega Bay	16	1
	Bodega Harbor	9	7
	Estero Americano	38	9

In general, watersheds in the northern areas of the County (Gualala River, Austin Creek, Dry Creek, Big Sulphur Creek, and Maacama Creek) consist of mountainous, rugged terrain with little urban development. Land use in these upper watersheds is predominantly rural, with timber production and grazing being the primary uses.

Most of central Sonoma County is part of the Russian River watershed and ultimately drains west to the Pacific Ocean. This area has moderate topography and lies in the ancient alluvial floodplain of the Russian River. Much of the suburban and urban development of Sonoma County is located inland within sub-watersheds, including Healdsburg, Windsor, Santa Rosa, Sebastopol, Rohnert Park and Cotati. These inland sub-watersheds drain to, and have the potential to impact, coastal surface waters and groundwater.

The Coastal Zone includes many small watersheds which are drained by stream segments that flow a short distance from the first coastal ridgeline directly to the Pacific Ocean. These individual small coastal drainage basins are collectively referred to as the Frontal Pacific Ocean watershed. Streams in these watersheds flow through areas of steep terrain and marine terraces. Coastal streams typically enter the ocean at small sandy beach inlets periodically along steep rocky coastal bluffs.

2.3 Aquifers

Groundwater is an important source of agricultural, industrial, and domestic water supply in Sonoma County. While the Russian River is the primary source of domestic water for the County's urban areas, most rural areas are served by groundwater. Groundwater resources are tapped by both municipal and private wells. However, not all groundwater in the County is of sufficient volume, has a reasonable rate of recharge, or is suitable for drinking water or other purposes.

Some groundwater naturally contains dissolved substances that can cause health problems, depending on the concentrations and combinations of the substances present. According to the State Water Resources Control Board (State Board), groundwater is also often polluted by human activities that generate contaminants such as microorganisms, gasoline and diesel fuels, solvents, nitrates, pesticides, pharmaceuticals, and metals. The underground flow and concentration of these contaminants, as well as the intrusion of ocean saltwater into groundwater, can be influenced by the extraction of groundwater and changes in levels of groundwater and surface water.

The California Department of Water Resources (DWR) has identified the groundwater basins and subbasins in Sonoma County in DWR Bulletin 118. In the Sonoma County Coastal Zone, they include the Bodega Bay Area (DWR 1-57, 2,680 acres), Wilson Grove Formation Highlands (DWR 1-59, size unavailable), Lower Russian River Valley (DWR 1-60, 10 square miles), and Fort Ross Terrace Deposits (DWR 1-61, 3.5 square miles in Sonoma County). **Figures C-WR-2a-c** shows the locations of the groundwater

basins in the Coastal Zone. None of these groundwater basins are currently designated by DWR as medium- or high-priority groundwater basins.

Most of the County's groundwater basins are centered along major creek and river valleys. Recharge of groundwater basins typically occurs along the major streams as well as their principal tributaries. The principal water bearing formations in Sonoma County groundwater basins are typically alluvium. While other geologic units can yield adequate amounts of water in some areas, much of the County may not have dependable groundwater supplies.

In the Coastal Zone, groundwater aquifers consist mainly of fractured bedrock of the Franciscan Complex, a large area of Jurassic and Cretaceous sedimentary, metamorphic, and igneous rocks from the ocean's crust that were mixed by shearing along faults and stuck to the continental edge as the ocean floor slid down under the edge of western North America.

In fractured rock aquifers, groundwater is stored in the fractures, joints, bedding planes, and cavities of the rock mass. The Franciscan Complex is generally considered to be non-water bearing; water availability largely depends on the nature of the fractures and their interconnection. Groundwater is derived from local rainfall that has percolated down into the rock, existing in small fractures in the zone of saturated rock below the water table.

Poor groundwater quality can be the result of geologic conditions, such as the highly mineralized water extracted from the Sonoma Volcanics or brackish water from the Petaluma Formation. Also, some groundwater naturally contains dissolved elements such as arsenic, boron, selenium, mercury or radon (a gas formed by the natural breakdown of uranium in the soil).

2.4 Water Rights

The California Constitution requires that water be used in a reasonable and beneficial manner and prohibits misuse and waste of water. Water is used beneficially when, for example, it is used to drink, grow crops, or wash cars. What is reasonable water use depends on the circumstances. For example, it could be unreasonable to wash cars during a severe drought. All types of water rights are subject to this constitutional provision, and a State agency, the State Board, is authorized to take action to prevent unreasonable uses of water.

There are two principal types of surface water rights in California, riparian rights and appropriative rights. A riparian water right allows a landowner bordering a watercourse

to share the water flowing past his property with other riparian landowners. An appropriative right is a use-based right dependent upon physical control and beneficial use of the water, rather than any special relationship between land and water. Since 1914, all new appropriations of surface water require a permit from the State.

The Sustainable Groundwater Management Act (SGMA) of 2014 provides for establishment of Groundwater Sustainability Agencies in designed groundwater basins and grants these agencies new authorities to manage groundwater use, recharge, and environmental impacts. The Act requires development of sustainable groundwater management plans for groundwater basins designated by Department of Water Resources as medium- or high-priority groundwater basins. Sonoma County is currently in the process of meeting the schedule for compliance with the new state law. There are no medium- or high- priority basins in the Coastal Zone.

2.5 Biotic Resources and Water

The policies in the Water Resources Element recognize the importance of natural vegetation and wildlife habitat, both as beneficial water uses whose needs must be considered but also as factors in maintaining adequate water quality and quantity. The supporting biotic resource goals, objectives, and policies are contained in the Open Space and Resource Conservation Element.

Trees and other natural vegetation depend on water, but their presence also affects the long-term quality and quantity of water resources in several ways. The natural vegetation found around wetlands, streams, and lakes benefits water quality by filtering out sediment and pollutants from stormwater runoff before it enters surface water bodies. Vegetation can also block stream flows and increase the retention of stormwater, thereby recharging groundwater, absorbing pollutants, and modifying peak flood levels. Vegetation on stream banks reduces bank erosion as a source of sediment. Trees and shrubs provide shade which can lower the temperature of the water and increase its value as fishery habitat in a warm climate. Streamside trees that fall into stream channels may aid fishery habitat by providing shelter, diverting flood flows, and scouring deep holes. The Open Space and Resource Conservation Element also includes discussion of the relationship of biotic resources to water.

Trees and other vegetation need and use water but also help maintain year-round water levels in streams and groundwater. In the fall, many trees stop absorbing water. Trees in exposed foggy areas reportedly increase precipitation. Trees in any location provide shade that cools the ground surface and reduces evaporation. Plants add moisture to the air through transpiration of water from their leaves.

2.6 Regulatory Framework

In Sonoma County, the Sonoma Creek and Petaluma River watersheds are in the Bay Area Regional Quality Control Board's jurisdiction, and the remainder of the County is under the jurisdiction of the North Coast Regional Water Quality Control Board. Waste discharge requirements are set by each Regional Water Board for point sources of pollution, including industrial and commercial uses, community wastewater and storm water management systems, and individual septic systems. Implementation of point source controls has led to improvements in the quality of discharges and regional water quality.

California's Non-point Source Pollution Control Program (CA NPS Program) addresses federal requirements under both the Clean Water Act and the Coastal Zone Management Act (Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990), by implementing California's Coastal Nonpoint Pollution Control Program on a statewide basis. The lead State agencies responsible for implementing the CA NPS Program are the State Water Resources Control Board, designated as the lead water quality agency) and the California Coastal Commission (designated as the lead coastal zone management agency), along with the nine Regional Water Boards. The California Coastal Act also mandates protection and restoration of water resources in the Coastal Zone.

The Local Coastal Program provides water quality protection measures in accordance with Coastal Act requirements for development in the Coastal Zone, which supplement the State Board's regulations. The Local Coastal Program is the standard of review for the Coastal Act Development Permits, issued by Sonoma County, including appeals to the Coastal Commission of Coastal Development Permits issued by Sonoma County.

Over time, development and land use have resulted in erosion, sedimentation, and degradation of surface water quality in the Russian River watershed and elsewhere. Surface water quality concerns in some watersheds include low levels of dissolved oxygen; high temperatures; and high levels of coliform bacteria, ammonia, nutrients, pathogens, metals, herbicides, pharmaceuticals and exotic species. These watershed conditions often impact coastal waters, especially in lagoons and coastal estuaries.

2.6.1 National Pollutant Discharge Elimination System

The focus of regulatory efforts has expanded in recent years to address surface runoff and pollutants entering into drainage channels, streams and groundwater. The National Pollutant Discharge Elimination System (NPDES) program requires individual permits for construction sites that disturb more than one acre of land, and for certain industrial and

commercial activities. The NPDES program also regulates and requires municipal area wide permits for urbanized areas under the Municipal Separate Storm Sewer System (MS4) permit program. Sonoma County's coastal area is not currently regulated under the MS4 permit program. However, design, siting, and planning requirements have been included in this Local Coastal Plan to provide a similar standard of water quality protection in the Coastal Zone.

2.6.2 Total Maximum Daily Load Program

The other major Clean Water Act program affecting the County in the future is the Total Maximum Daily Load (TMDL) program. Regional Water Boards are required to determine which surface water bodies are impaired, assess pollutant sources, determine acceptable levels, allocate allowable pollutant loads to various sources, and establish implementation programs. Impaired water bodies are those where beneficial uses of water are limited due to certain pollutants. Water bodies in Sonoma County that have been identified as impaired are the Russian River, Gualala River, Lake Sonoma, Santa Rosa Creek, Laguna de Santa Rosa, Estero Americano, Stemple Creek, Sonoma Creek, Petaluma River, and San Pablo Bay. Of these only the Russian River, Gualala River and Estero Americano are located within the Coastal Zone. Pollutants of concern typically in Sonoma County are sediment/siltation, nutrients, pathogens, and temperature but also include low dissolved oxygen, mercury, other metals, herbicides and exotic species. The listing of impaired water bodies is periodically re-evaluated by the Regional Water Boards.

The time frames for completing the TMDL processes in Sonoma County vary over the course of the next decade or so. In the meantime, Sonoma County will continue to be proactive in addressing water quality issues through a combination of education, restoration, and development policies. Total Maximum Daily Loads have been adopted for excess sediment and pathogens in Sonoma Creek and for urban pesticides in Petaluma River watershed as part of the Bay Area Regional Water Board's Urban Creek's Pesticide TMDL. TMDLs are also being developed for surface waters in the Coastal Zone including, the Russian River and Gualala River.

3. WATER RESOURCES POLICY

Regional, State, and Federal regulatory agencies and associated policies provide the framework for local water protections. The Water Resources Element establishes goals, objectives, and policies to further protect and sustainably manage coastal water resources.

3.1 Minimize Water Pollution from Runoff and Other Sources

GOAL C-WR-1: **Protect, restore and enhance the quality of surface and groundwater resources to meet the needs of all reasonable beneficial uses.**

Objective C-WR-1.1: Protect and, where feasible, restore the quality of coastal waters. Coastal waters include the ocean, rivers, streams, wetlands, estuaries, lakes, and groundwater.

Objective C-WR-1.2: Protect water quality and improve water quality of impaired surface waters. Focus water quality improvement efforts in coastal waters and watersheds which contain surface waters that are the most impaired, have the highest value for fish and wildlife, or are at most risk from future development.

Objective C-WR-1.3: Plan, site, and design development to minimize the transport of pollutants in runoff from the development, to avoid pollution of coastal waters.

Objective C-WR-1.4: Plan, site, and design development to minimize post-development changes in the site's runoff volume, flow rate, timing, and duration, to prevent adverse changes in the hydrology of coastal waters.

Objective C-WR-1.5: Reduce the degradation of surface water quality from the failure of septic and other wastewater treatment systems.

Objective C-WR-1.6: Educate the public about practices and programs to minimize water pollution, and provide educational and technical assistance to agriculture in order to reduce sedimentation and increase on-site retention and recharge of storm water.

Objective C-WR-1.7: Secure funding sources for development of Sonoma County Coastal Zone groundwater quality assessment, monitoring, remedial and corrective action, and awareness/education programs.

The following policies, in addition to those in the Land Use, Open Space and Resource Conservation, and Public Facilities and Services Elements shall be used to accomplish these objectives:

Policy C-WR-1a: The approval for any project proposed within 200 feet of an impaired surface water shall include as conditions of approval design features and mitigation measures to prevent impacts to the quality of such waters. **(New)**

Policy C-WR-1b: New development and redevelopment shall include measures to minimize post-development changes in the runoff flow regime, control pollutant sources, and, where necessary, remove pollutants. Such measures shall take into account existing

site characteristics that affect runoff (such as topography, drainage, vegetation, soil conditions, natural hydrologic features, and infiltration conditions). In addition, these measures should be considered early in site design planning and through alternative analysis. Such measures include, but may not be limited to the following:

- (1) Incorporate storm water management measures.
 - (2) Use pollutant Source Control Best Management Practices (BMPs), which can be structural features (post construction) or operational actions (during construction), in all development to minimize the transport of pollutants in runoff from the development.
 - (3) Incorporate Treatment Control BMPs to remove pollutants of concern when the combination of site design and source control BMPs are not sufficient to protect water quality, or to meet State and Federal water quality objectives.
 - (4) Plan, site, and design development to maintain or enhance on-site infiltration of runoff, where appropriate and feasible. Minimize the installation of impervious surfaces, especially directly-connected impervious areas, and, where feasible, increase the area of pervious surfaces in re-development, to reduce runoff.
 - (5) Plan, site, and design development to protect and, where feasible, restore natural hydrologic features such as groundwater recharge areas, natural stream corridors, floodplains, and wetlands.
 - (6) Plan, site, and design development to preserve or enhance non-invasive vegetation to achieve water quality benefits such as transpiration, interception of rainfall, pollutant uptake, shading of waterways to maintain water temperature, and erosion control.
 - (7) In areas adjacent to an Environmentally Sensitive Habitat Area (ESHA), plan, site, and design development to protect the ESHA from any significant disruption of habitat values resulting from the discharge of storm water or dry weather flows.
- (New) (Model LCP)**

Policy C-WR-1c: Post-development peak storm water runoff discharge rates shall not exceed the estimated pre-development rate. **(New)**

Policy C-WR-1d: Avoid construction of new storm water outfalls and direct storm water to existing facilities with appropriate treatment and filtration, where feasible. Where new outfalls cannot be avoided, plan, site, and design outfalls to minimize adverse impacts to coastal resources from outfall discharges, including consolidation of existing and new outfalls where appropriate. **(New) (Model LCP)**

Policy C-WR-1e: Some developments have a greater potential for adverse impacts to water quality and hydrology due to the extent of impervious surface area, type of land use, or proximity to coastal waters or tributaries. As determined by Permit Sonoma, on

a case-by-case basis, such developments may require Treatment Control Best Management Practices (BMPs) for post-construction treatment of storm water runoff. Applicants for these types of developments shall do the following:

- (1) Conduct a polluted runoff and hydrologic site characterization by a qualified licensed professional, early in the development planning and design stage, and document the expected effectiveness of the proposed BMPs.
- (2) Conduct an alternatives analysis to demonstrate that there are no appropriate and feasible alternative project designs that would substantially improve on-site runoff retention, if a proposed development will not retain on-site the runoff volume from the appropriate design storm using a Low Impact Development (LID) approach.
- (3) Use Treatment Control BMPs or suites of BMPs designed to treat, infiltrate, or filter the amount of storm water runoff produced by all storm events up to and including the 1st inch of a 24 hour storm event, and/or the 85th percentile, 1-hour storm event (with an appropriate safety factor of 2 or greater) for flow-based BMPs.
- (4) Use Treatment Control BMPs or suites of BMPs to remove pollutants from any portion of the design storm runoff volume that will not be retained on-site, or if additional pollutant removal is necessary to protect coastal waters.
- (5) Use a Runoff Control BMP or suites of BMPs including LID and minimization of impervious surfaces for the design storm, consistent with Regional Water Quality Control Board storm water permits or applicable State Water Resources Control Board requirements, to minimize adverse post-development changes in the runoff flow regime. **(New) (Model LCP)**

Policy C-WR-1f: Permits for new development shall be conditioned to require a mechanism for verification of inspection, monitoring, repair, and maintenance of Source Control and Treatment Control Best Management Practices (BMPs) as necessary so that they function properly for the economic life of the development. The condition shall specify that this requirement runs with the land, such that the burden for implementing this requirement becomes the responsibility of the new owner upon transfer of the property. **(New) (Model LCP)**

Policy C-WR-1g: Approvals for new development and redevelopment shall ensure water quality impacts from construction are minimized by:

- (1) Limiting the project footprint, phasing grading activities, implementing soil stabilization and pollution prevention measures, and preventing unnecessary soil compaction;
- (2) Limiting land disturbance from construction (e.g., clearing, grading, and cut-and-fill), especially in erosive areas (including steep slopes, unstable areas, and erosive soils);

- (3) Requiring soil stabilization Best Management Practices be implemented over disturbed areas as soon as feasible;
- (4) Requiring that grading plans include measures to avoid soil erosion and sedimentation of storm water to the maximum extent feasible;
- (5) Requiring as a condition of grading permit approval for all new development, regardless of the area of land to be disturbed, that soil stabilization and erosion control measures be installed in erosive areas of construction sites (e.g., steep slopes, unstable areas, and erosive soils);
- (6) Requiring treatment control BMP's adequate to avoid adverse impacts to habitat and water quality be identified and implemented for new development in or adjacent to Environmentally Sensitive Habitat Areas on sites that drain directly to surface waters, regardless of the area of land to be disturbed;
- (7) Requiring inspection of construction sites to verify implementation of approved erosion control plans and Storm Water Pollution Prevention Plans; and
- (8) Requiring BMPs be implemented for constructing, maintaining, and repairing roads and trails in County parks, including stabilizing erosion, clearing vegetation, resurfacing, and removing slide debris. **(New) (Model LCP)**

Policy C-WR-1h: All projects which involve construction of new storm drain inlets or maintenance of existing inlets shall be required to add a sign or stencil to each inlet with the equivalent of this language: "No dumping, drains into creek/ocean." **(New)**

Policy C-WR-1i: For new development and redevelopment projects that could affect water resources of Sonoma County's Coastal Zone, as a condition of permit approval and prior to permit issuance, require the applicant to:

- (1) Provide proof that all applicable local, state, and federal approvals related to water resources protection have been obtained. Such permits may include, but are not necessarily limited to the following:
 - a. National Pollutant Discharge Elimination System Permits (State and Regional Water Quality Control Boards)
 - b. Lake and Streambed Alteration Agreement (California Department of Fish and Wildlife)
 - c. Clean Water Act Section 404 Permit (U.S. Army Corps of Engineers)
- (2) Submit final project designs that demonstrate incorporation of applicable regulatory requirements, resource agency conditions of permit approval, and associated best management practices related to water resources protection. **(New)**

Policy C-WR-1j: The abatement of failing septic systems that pose a risk to public health or the environment shall be actively pursued. **(GP2020)**

Policy C-WR-1k: Initiate a review of any sewer system when it persistently fails to meet applicable standards. If necessary to assure that such standards are met, the County may deny new development proposals or impose moratoria on building and other permits that would result in a substantial increase in demand, and may impose strict treatment and monitoring requirements. **(GP2020)**

Policy C-WR-1l: Ensure that agricultural operations reduce non-point source pollution through the development and implementation of County-approved ranch plans and farm plans that demonstrate how the applicant intends to avoid, minimize, or mitigate the impact to water quality from agriculture. **(GP2020)**

Policy C-WR-1m: Design, construct, and maintain County buildings, roads, bridges, drainage, and other facilities to avoid or minimize sediment and other pollutants in storm water runoff. Implement Best Management Practices for their ongoing maintenance and operation. **(GP2020)**

Policy C-WR-1n: Encourage removal of abandoned, deteriorated piers and associated buildings in Bodega Bay, particularly those within the alignment of future trails. **(New)**

3.2 Groundwater

Sonoma County's groundwater plays an extremely important role in our natural environment, communities, industry sectors, and agriculture. In 2002, there were about 40,000 wells in Sonoma County, with 42 percent of the population supported at least in part by groundwater. Nearly all of the County's population relies on groundwater as either a primary or backup source of water supply. In the Coastal Zone, most users obtain their water from groundwater. Groundwater wells also supply community water systems and occasionally provide a supplemental or backup source for other sheet water flow collection systems. The release of contaminants or pollutants into groundwater from natural sources or human activities may have adverse impacts on human health, the environment, and property depending on the type, location, and quantity of materials released.

The amount of groundwater in an area varies by the recharge from rainfall, the surface runoff in streams and drainage channels, and the local underground geology. The alluvial soils, sand, and gravel found in valleys generally can hold large amounts of water and thus constitute the largest aquifers in the County. Sandstone and some other sedimentary rocks can still absorb some water. However, many upland areas and the Coastal Zone are comprised of harder rock formations that lack water storage capacity.

The climate of coastal Sonoma County provides abundant rainfall during the winter months, and potentially abundant groundwater recharge on an annual basis. The continual shortage of groundwater supplies in this area can be traced directly to the lack of storage capacity in much of the Franciscan Formation rocks that underlie the area. The Franciscan Formation is a large area of mixed sedimentary, metamorphic, and igneous rocks. Groundwater is stored in the fractures, joints, cavities, and bedding planes of the rocks. Rainfall that would otherwise percolate into the aquifer simply runs off into creeks and streams and then to the ocean for lack of storage space in most of the rocks.

Using information on geology and water yields, the County uses a four tier classification system to indicate general areas of groundwater availability. Class 1 are Major Groundwater Basins, Class 2 are Major Natural Recharge Areas, Class 3 are Marginal Groundwater Availability Areas, and Class 4 are Areas with Low or Highly Variable Water Yield. In addition to County mapping, the State regularly updates the maps of groundwater basins and prioritizes groundwater basins for sustainable management in the County.

With three small exceptions, Sonoma County's Coastal Zone is within the Class 4 Groundwater Availability Area. The exceptions are the Fort Ross Terrace Deposits groundwater basin, in the vicinity of The Sea Ranch, which is Class 3; the Lower Russian River Valley groundwater basin, adjoining the Russian River as far west as State Highway 1, which is Class 1; and the Wilson Grove Formation Highlands groundwater basin, along State Highway 1 North of the Estero Americano, which is Class 2. The remainder of the Coastal Zone is composed of Franciscan Complex rocks whose serpentine and shale members are typically non-water bearing. Chert, greenstone, and sandstone members of the Franciscan may possess water bearing fractures that yield sufficient and occasionally abundant water in some locations. The location of water-bearing bedrock is difficult to predict, so water availability is uncertain.

Public concerns over depletion of groundwater supplies have increased as development that relies on groundwater supply has increased. The County fully participates in the California Statewide Groundwater Elevation Monitoring (CASGEM) and continues to collect data about existing groundwater levels, water quality, and water use to best inform planning decisions.

In response to reports that groundwater levels have declined in some areas, the County has initiated a long-term program to increase the available data on groundwater resources and to systematically organize and use it as development is planned and new well permits are sought. Programs are underway to assess the available groundwater in

the County's three major basins, Santa Rosa Plain, Sonoma Valley and Petaluma Valley. In the fractured rock areas of the Coastal Zone, data from monitoring will improve our understanding of available groundwater resources. This growing body of data will produce better information for County decision makers to determine what further measures may be appropriate in order to properly manage groundwater resources.

GOAL C-WR-2: Manage groundwater as a valuable and limited shared resource.

Objective C-WR-2.1: Conserve, enhance, and manage groundwater resources on a sustainable basis that assures sufficient amounts of clean water required for future generations, the uses allowed by the Local Coastal Plan, and the natural environment.

Objective C-WR-2.2: Develop a scientifically based program to collect the data needed to assess and understand groundwater conditions.

Objective C-WR-2.3: Encourage new groundwater recharge opportunities and protect existing groundwater recharge areas.

Objective C-WR-2.4: Increase institutional capacity and expertise within the County to competently review hydrogeologic reports and data for critical indicators and criteria.

The following policies, in addition to those in the Public Facilities and Services, Land Use, and Open Space and Resource Conservation Elements, shall be used to accomplish these objectives:

Policy C-WR-2a: Ensure sufficient groundwater quantity and quality for existing and proposed uses reliant upon groundwater wells through application of County standards for pump tests, well yields, pollutant levels, and water storage, particularly for higher capacity wells. **(GP2020)**

Policy C-WR-2b: Continue the County program to require groundwater monitoring for new or expanded commercial and industrial operations using wells. Where justified by the monitoring program, establish additional monitoring requirements for other new wells. **(GP2020)**

Policy C-WR-2c: Proof of groundwater with a sufficient yield and quality to support proposed uses in Class 3 and 4 Groundwater Availability Areas shall be required for discretionary permits. Test wells may be required in Class 3 Groundwater Availability Areas. Test wells or the establishment of community water systems to support new development in Class 4 Groundwater Availability Areas shall be required. Permit applications for new development in Class 3 and 4 Groundwater Availability Areas shall be denied unless the applicant can demonstrate through a hydrogeologic report that the proposed use will not cause an adverse effect on groundwater quantity or quality, or

exacerbate an overdraft condition in a groundwater basin, subbasin, or fractured rock aquifer. Procedures for proving adequate groundwater shall consider streamflow, groundwater overdraft, land subsidence, saltwater intrusion, and the expense of such study in relation to the water needs of the project. **(GP2020)**

Policy C-WR-2d: New development and redevelopment projects in Urban Service Areas, where the density of development and thus extent of impervious surface area is greater than in Rural Communities, shall be required to maintain the site's pre-development recharge of groundwater to the maximum extent practicable. **(GP2020)**

Policy C-WR-2e: Encourage public water suppliers to monitor and report groundwater levels, yields, and other information on groundwater conditions. **(GP2020 Revised)**

3.3 Public Water Systems

An adequate and sustainable water supply is essential if Sonoma County is to serve projected increases in population, housing, employment, business, and agriculture. The main purpose of this section is to address what the County can do to help maintain the long-term adequacy of water supply services provided by public and private entities, given the legal limitations on the County's authority over such services.

The Sonoma Coast has about 16 water systems which fall under the regulatory authority of the SWRCB as a public water system.

The large public water systems on the coast are The Sea Ranch Water Company with 1,857 connections and the Bodega Bay Public Utilities District with 1,058 connections. The small public water systems range from the Sereno del Mar Mutual Water Company with 168 connections to the Blue Heron Restaurant with one connection. The small public water systems supply water to a wide variety of uses such as businesses, residences, schools, and small unincorporated communities. Most are owned by mutual companies or other private entities, and a few are operated by special districts. These systems have small revenue bases and relatively high per capita costs and often have difficulty financing major capital investments needed to replace aging facilities or accommodate growth. Additional information about public water systems on the coast is provided in Public Facilities and Services Element Section 3.1 (Water Services) and **Table C-PF-1**.

All public water systems must meet and maintain water quality standards established by the Sonoma County Department of Health Services and the Regional Water Quality Control Boards. The suppliers are required to prepare and adopt wellhead protection plans that will avoid future contamination. To the extent that these plans may need to rely upon the regulation of land uses around supply wells, the County's cooperation may be necessary.

In light of concerns over the future availability of water from surface and groundwater sources, water conservation, re-use, and alternative resources are increasingly important to providing adequate water supplies in the future.

GOAL C-WR-3: **Encourage public water suppliers to provide an adequate water supply that meets long-term needs, is consistent with the adopted Local Coastal Plan and community water management plans, and maintains water resources for other water users while protecting the natural environment.**

Objective C-WR-3.1: Assist public water suppliers in collecting and disseminating surface and groundwater data, assessing available water supplies, and protecting water quality.

Objective C-WR-3.2: Work with public water suppliers in developing and implementing long-term plans for water supply, storage, and delivery necessary to first meet existing water demands; and secondly to meet planned growth within the designated service areas, consistent with the sustainable yield of water resources.

Objective C-WR-3.3: Work with public water suppliers to balance reliance on groundwater and surface water to assure the sustainability of both resources.

The following policies, in addition to those in the Land Use and Public Facilities and Services Elements, shall be used to accomplish these objectives:

Policy C-WR-3a: Assist public water suppliers in complying with Federal and State water quality standards by assuring that water sources used for public water systems are not contaminated by land uses or pollutants in the watershed, by supporting continued study and monitoring of water quality, and by encouraging acquisition of critical watershed areas by the water suppliers or the Sonoma County Agricultural Preservation and Open Space District. In furtherance of this initiative, work with public water suppliers in developing and implementing wellhead protection plans. **(GP2020)**

Policy C-WR-3b: Encourage local public agencies that are public water suppliers, including county-dependent districts, special districts, and other local public agencies, to consult with the County prior to acquiring a site or developing any well or facility for public water supplies in the unincorporated area; and require a determination of consistency with the Local Coastal Plan and supporting technical documentation for development of any such well or facility. **(GP2020)**

Policy C-WR-3c: Encourage the preparation of master facilities plans and urban water management plans for all public water suppliers to design and construct all facilities in accordance with sustainable yields. A master facilities plan should contain, but not be limited to the following:

- (1) Maps showing future service area boundaries;
- (2) Forecasted growth and relationship to Local Coastal Plan projections and limits;
- (3) Projected service and facility needs;
- (4) Estimated costs and revenues for needed improvements;
- (5) System design parameters and assumptions;
- (6) Monitoring and mitigation measures to assure long-term adequacy of sources, including during possible drought conditions; and
- (7) Water conservation measures.

In the event that a master plan or monitoring fails to show adequate public water facilities or supplies for planned growth, consider moratoria on plan amendments, zoning changes, building permits, or other entitlements in order to protect services to existing residents. **(GP2020)**

Policy C-WR-3d: Support the actions and facilities needed by public water suppliers to meet the demands estimated in adopted master facilities plans, consistent with the adopted Local Coastal Plan, community water management plans, and in a manner that protects the natural environment. **(GP2020)**

Policy C-WR-3e: Encourage public water suppliers to avoid or minimize significant adverse impacts on the environment resulting from water supply, storage, and transmission facilities, including impacts on other water users. **(GP2020)**

Policy C-WR-3f: Support cooperative inter-regional planning efforts by the public water suppliers, their contractors, and other existing water users, to consider future demand projections concurrently with the availability of sustainable water supplies. **(GP2020 Revised)**

3.4 Water Conservation and Re-Use

Water conservation has long been a practice in Sonoma County households, businesses, and agriculture. The rise of environmental consciousness in the 1970s and a prolonged drought in 1976 and 1977 led to the early efforts by some water suppliers to reduce demand. Planned re-use of treated water in the Santa Rosa Plain was initiated by the City of Santa Rosa during this same period as part of its regional wastewater system. Most of these earlier conservation efforts were not well publicized and, due to the

relative abundance of fresh water sources (outside the Coastal Zone), were not thought to be significant as a water supply strategy.

In recent years, both water conservation and re-use programs have expanded considerably. As advanced treatment has become an increasingly standard practice, re-use programs are becoming even more viable. Meeting peak water demands in the future may require increased water conservation efforts and water recycling by water users in both urban and rural areas.

The Sonoma Coast has always been a water scarce area. As described above in Section 3.2 (Groundwater), most of the County's Coastal Zone is in a Class 4 Groundwater Availability Area, underlain by typically non-water bearing Franciscan rocks. Therefore, there is an even greater need within the County's Coastal Zone to increase the efficiency of water use and reduce demand for water by applying new water conservation and re-use technology and implementing water conservation programs.

GOAL C-WR-4: Increase the role of water conservation and safe, beneficial water re-use in meeting water supply needs of both urban and rural users.

Objective C-WR-4.1: Increase the use of recycled water where it meets appropriate standards of quality and quantity for the intended use.

Objective C-WR-4.2: Promote and encourage the efficient use of water by all water users.

Objective C-WR-4.3: Conserve and recognize stormwater as a valuable resource.

The following policies, in addition to those in other sections of the Water Resources Element and the Public Facilities and Services Element, shall be used to accomplish these objectives:

Policy C-WR-4a: Require stormwater and wastewater disposal methods in accordance with all applicable Federal, State, and local regulations to avoid or minimize reliance on discharges into natural waterways. Where applicable, comment on projects and environmental documents to ensure that low impact development practices and reclamation, conservation, and reuse programs are protective of surface and groundwater resources. **(GP2020)**

Policy C-WR-4b: Water conserving plumbing and water conserving landscaping shall be required in all new development projects. Prior to building permit issuance, the applicant shall submit to Permit Sonoma for review and approval a Water Conservation Plan for all buildings and landscaping. The Water Conservation Plan shall include all reasonably feasible measures to reduce water demand to the maximum extent feasible

and enhance water resource recovery to maintain sustainable water supplies. Measures that must be evaluated include: installation of low-flow fixtures, best available conservation technologies for all water uses, rainwater and stormwater collection systems and graywater reuse. Landscaping plans must comply with the County Water Efficient Landscape Ordinance. Verification from a qualified irrigation specialist that landscaping plan complies with the County Ordinance shall be provided. The measures in the plan shall be implemented by the applicant and verified by Permit Sonoma staff prior to Certificate of Occupancy or operation of the use. **(GP2020 Revised)**

Policy C-WR-4c: County operated water systems shall be required to minimize water loss and waste and promote programs to minimize water loss and waste by public water suppliers and their customers. **(GP2020 Revised)**

Policy C-WR-4d: Encourage and support conservation for agricultural activities that increase the efficiency of water use for crop irrigation, frost protection, and livestock. **(GP2020)**

Policy C-WR-4e: Ensure that public wastewater disposal systems are designed to reclaim and reuse recycled water for agriculture, geothermal facilities, landscaping, parks, public facilities, wildlife enhancement, and other uses to the extent practicable, provided that the water meets the applicable water quality standards and is supplied in appropriate quantities for the intended uses. **(GP2020)**

Policy C-WR-4f: Encourage graywater systems, roof catchment of rainwater, and other methods of re-using water; and minimizing the need to use potable surface water or groundwater. **(GP2020)**

Policy CWR-4g: Encourage property owners to incorporate only native, drought-tolerant, and low water use plants to conserve water and reduce the potential for runoff and erosion. **(New)**

Policy C-WR-4h: Support programs to monitor and determine per capita or per unit water use in each community and area, and use these data in groundwater management plans, master facilities plans, and wastewater treatment plans. **(GP2020)**

Policy C-WR-4i: Encourage monitoring for all water use and water metering for public water suppliers that require water users to pay for costs of the amount of water used. Encourage tiering and other pricing mechanisms for public water suppliers that provide incentives for water users to employ conservation and reuse programs. Actively encourage public water suppliers to maximize water re-use and conservation prior to increasing net water use for new development. **(GP2020)**

Policy C-WR-4j: Promote programs for retrofitting plumbing, providing cost rebates, identifying leaks, changing landscaping, irrigating efficiently, and other methods of reducing water consumption by existing users. **(GP2020)**

3.5 Water Importing and Exporting

For many years, Sonoma County has relied to some degree upon importation of water from sources outside of the County borders. Since 1908, water has been diverted from the Eel River watershed in Mendocino County through a hydroelectric power plant into the Russian River watershed. This water has increased dry season flows in the Russian River and supplemented water supplies for downstream users.

GOAL C-WR-5: **Ensure that new proposals for surface and groundwater imports and exports are consistent with Sonoma County's ability to sustain an adequate supply of high quality water for all its water users and dependent natural resources.**

Objective C-WR-5.1: Protect the interests of current and future water users of Sonoma County in the review of proposals to export water from Sonoma County.

Objective C-WR-5.2: Ensure consideration of the environmental impacts of all proposed water imports and exports.

The following policies, in addition to those in the other sections of the Water Resources Element, shall be used to accomplish these objectives:

Policy C-WR-5a: Assess the environmental impacts and the impacts on current and future Sonoma County water users of any proposals to physically export water outside of Sonoma County, or to substantially increase existing out-of-County exports. Consideration of any proposal to export additional water shall prioritize benefit of and need for the water in Sonoma County, and assure that water needed by Sonoma County's urban, rural, and agricultural water users will not be exported outside the county. **(GP2020)**

Policy C-WR-5b: Full assessment of the environmental impacts shall be required for any proposals to import additional water into Sonoma County. **(GP2020)**

Policy C-WR-5c: Where allowed by State law, require that groundwater not be exported off-site for commercial purposes without prior County approval. **(GP2020)**

3.6 Watershed Management

Watershed management is a holistic approach to managing water resources and other watershed functions such as fish and wildlife, riparian functions, and ecological services. Watershed management allows for an integrated approach to surface water, groundwater, and water supply management taking into account effects on stream flow, groundwater levels, water quality and habitat conditions.

GOAL C-WR-6: **Improve the understanding, valuation, and sound management of the water resources in the diverse watersheds of the Sonoma County coast.**

Objective C-WR-6.1: Seek and secure funding for addressing water resource issues on a watershed basis.

Objective C-WR-6.2: Ensure consideration of the environmental impacts of all proposed water imports and exports.

The following policies, in addition to those in other sections of the Water Resources Element, shall be used to accomplish these objectives:

Policy C-WR-6a: Prioritize a watershed management approach to remediating identified water related problems. **(GP2020)**

Policy C-WR-6b: Utilize the North Coast Integrated Coastal Watershed Management Plans for the Salmon Creek and the Russian River Watersheds where appropriate and feasible. **(New)**

4. IMPLEMENTATION PROGRAMS

4.1 Water Resources Implementation Programs

Program C-WR-1: Develop and provide educational, outreach, or technical assistance programs focusing on water quality to owners and managers of agricultural operations and timberlands. Inform owners and managers of agricultural lands, including vineyards, orchards, row crops, grazing, ranches, and dairies, about the Agricultural Commissioner's Best Management Practices for erosion and sediment control, including on-site retention of storm water, maintenance of natural sheetflow and drainage patterns, and avoidance of concentrated runoff, particularly on slopes greater than 35 percent; and for protection of streams and other surface waters from the effects of livestock grazing. **(New)**

Program C-WR-2: Develop and require compliance with standards for the siting and design of harbors, marinas, and other waterfront development, regardless of the size of

the area to be disturbed. Require stormwater source control Best Management Practices to minimize polluted runoff including installation of trash receptacles with lids, posting of No Littering signs; and installation and maintenance of filters in storm drains. **(New)**

Program C-WR-3: Consider developing guidelines for development in Rural Communities that would provide for retention of the site's pre-development rate of groundwater recharge. **(GP2020 Revised)**

Program C-WR-4: Initiate and support educational programs to inform residents, business and agriculture owners and operators, and other groundwater users of best management practices in the areas of efficient water use, water conservation, and increasing groundwater recharge. **(GP2020)**

Program C-WR-5: In cooperation with the Sonoma County Water Agency, California Department of Water Resources, other public agencies, and well owners, establish and maintain a system of voluntary monitoring of wells throughout the County, using public water system wells and private wells where available. Encourage participation in voluntary monitoring programs and, if funds are available, consider funding of well monitoring where determined necessary in order to stimulate participation. **(GP2020)**

Program C-WR-6: In order to assess groundwater resources, review well permit data, monitoring data and identify special study areas where additional groundwater studies are needed. In each such special study area that is approved by the Board, develop a comprehensive groundwater assessment that includes the following:

- (1) An existing system of monitoring wells and stream gauges;
- (2) Locations of water wells;
- (3) Available data on groundwater and surface water levels and contamination;
- (4) Maps and graphs that show past and present data and changes in precipitation, imports, groundwater levels, groundwater quality, rates of extraction, and the relationship of groundwater to surface water;
- (5) Drillers' logs, geologic data and monitoring data needed to estimate water yields in the area;
- (6) Estimated future rates of imports, recharge, extraction, exports, changes in groundwater levels, and possible changes in groundwater quality;
- (7) A water budget for the area that estimates the total amount of water gain or loss in the area;
- (8) Any needed changes in well monitoring, data collection and reporting; and
- (9) Provisions for applicant fees and other funding of County costs.

If an area assessment, as defined above, demonstrates a need for additional management actions to address groundwater problems, a plan for managing groundwater supplies shall be prepared pursuant to the California Water Code or the County's land use or other legal authority. Include involvement by the affected water users, well drillers, local agencies, private water companies and landowners. **(GP2020)**

Program C-WR-7: Work with the State Water Resources Control Board, California Department of Water Resources, California Department of Health Services, California Environmental Protection Agency, public water suppliers, and applicable County agencies to secure funding sources for developing groundwater assessment, protection, enhancement, and management programs. **(GP2020)**

Program C-WR-8: Develop a program to facilitate the tracking and maintenance of consistency between the adopted Local Coastal Plan, adopted groundwater management plans, and the master facilities plans of public water suppliers. Such a program should include meetings between Permit Sonoma and public water suppliers, Permit Sonoma review of proposed master facilities plans, and referral of Local Coastal Plan changes to all public water suppliers. **(GP2020)**

Program C-WR-9: Use water effectively and reduce water demand by developing programs to:

- (1) Increase water conserving design and equipment in new construction, including the use of design and technologies based on green building principles;
- (2) Educate water users on water conserving landscaping and other conservation measures;
- (3) Encourage retrofitting with water conserving devices;
- (4) Design wastewater collection systems to minimize inflow and infiltration; and
- (5) Reduce impervious surfaces to minimize runoff and increase groundwater recharge. **(GP2020)**

Program C-WR-10: Assess water use by County buildings and facilities and reduce water consumption to the maximum extent feasible. **(GP2020)**

Program C-WR-11: Consider amending County codes to increase the use of recycled water for new commercial, residential, and agricultural development. **(GP2020 Revised)**

Program C-WR-12: Where a problem related to water is identified, promote and seek funding for evaluating and remediating the problem through a watershed management approach. **(GP2020)**

4.2 Other Initiatives

Other Initiative C-WR-1: Work with the California Coastal Commission, Regional Water Board, Sonoma County Water Agency, public water suppliers, and other interested parties to minimize polluted runoff from development, and to continue to develop and implement effective water quality plans and measures. **(GP2020)**

Other Initiative C-WR-2: Work with the Regional Board in development of TMDLs, TMDL Implementation Plans, water quality monitoring, and programs and projects for water quality restoration and remediation for impaired water bodies to improve water quality. **(GP2020)**

Other Initiative C-WR-3: Continue to cooperate with Mendocino County, the Regional Water Board, and CalFire to reduce water quality impacts of timber harvest in the Gualala River watershed. **(New)**

Other Initiative C-WR-4: Coordinate with the North Coast Regional Water Quality Control Board, California Coastal Commission, watershed focus groups, and stakeholders in collecting, evaluating, and using coastal watershed-specific water resource information. **(GP2020)**

Other Initiative C-WR-5: Work with the Regional Water Board and coastal communities to evaluate and monitor impacts on surface and groundwater quality caused by the operation of septic systems in existing and suspected problem areas. **(New)**

Other Initiative C-WR-6: Coordinate with the U.S. Army Corps of Engineers, the Regional Water Board and the Coastal Commission to continue maintenance dredging in Bodega Bay and other areas on the Sonoma Coast in accordance with the California Coastal Act. Dispose of dredge spoils in a manner that protects habitat and water quality and in accordance with all local, state, and federal permit requirements. **(New)**

Other Initiative C-WR-7: Support the Sonoma County Water Agency with development of flood control design criteria that considers stream geomorphic analysis, and the use of biotechnical bank stabilization methods for the purpose of preventing erosion and siltation in drainage swales and streams. **(GP2020)**

Other Initiative C-WR-8: Work with public water suppliers in assessments of the sustainable yield of surface water, groundwater, recycled water, and conserved water, including during possible drought periods. This work should include the exploration of potentially feasible alternative water supplies. Surface and groundwater supplies must remain sustainable and not exceed safe yields. **(GP2020)**

Other Initiative C-WR-9: Request technical assistance and water resource data from public water suppliers and share available water resource information with them and the public. **(GP2020)**

Other Initiative C-WR-10: Help public water suppliers disseminate information on the limits of available water supplies, how the supplies can be used efficiently, the possible effects of drought conditions, acceptable levels of risk of shortage for various water users, priorities for allocation of the available water supply, conditions for use of limited supplies, and limits of alternate sources that could be used or developed. Towards this end, support water conservation and education programs which provide measurable targets for public water suppliers. **(GP2020)**

Other Initiative C-WR-11: Cooperate with public water suppliers in planning, developing, and constructing storage and transmission facilities needed to supply water pursuant to adopted Local Coastal Plan policies, urban water management plans, water supply agreements, master facilities plans and, where applicable, programs to mitigate identified groundwater overdraft conditions. **(GP2020)**

Other Initiative C-WR-12: Coordinate with the North Coast Regional Water Quality Control Board and California Department of Water Resources to promote stormwater impoundments for agricultural uses. **(GP2020)**

Other Initiative C-WR-13: Encourage and support research on and monitoring of local groundwater conditions, aquifer recharge, watersheds, and streams where needed to assess groundwater quantity and quality. **(GP2020)**

Other Initiative C-WR-14: Encourage and support comprehensive studies of long-term changes in climate and precipitation patterns in the County and region. **(GP2020)**

Other Initiative C-WR-15: Where area studies or monitoring find that saltwater intrusion into groundwater has occurred, support analysis of how the intrusion is related to groundwater extraction; and support development of a groundwater management plan or other appropriate measures to avoid further intrusion and, where feasible, reverse past intrusion. **(GP2020)**

PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

PUBLIC SAFETY ELEMENT September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

PUBLIC SAFETY ELEMENT

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PUBLIC SAFETY ELEMENT

1. INTRODUCTION

1.1 Purpose

1.1.1 California Coastal Act

The Sonoma County coast contains 3,755 dwelling units as of 2018(Permit Sonoma GIS Community Profile) and, due to its outstanding natural beauty and recreational opportunities, hosts millions of visitors every year. However, many areas of the Coastal Zone are exposed to hazards related to earthquakes, geologic instability, flooding, sea level rise, tsunamis, coastal bluff erosion, wildland fire, and hazardous materials. The Public Safety Element establishes goals, objectives, and policies to protect the coastal residents and visitors from unreasonable risks from these hazards. The Element also identifies ongoing County initiatives, "Other Initiatives," that support public safety and promote inter-agency and community collaboration. Programs to implement proposed policies are also identified at the end of this element.

The 1976 California Coastal Act directs that new development minimize risks to life and property from environmental hazards and to avoid substantial alteration of natural land forms. Below is Section 30253, the applicable section of the Coastal Act.

Section 30253.

New development shall do all of the following:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluff and cliffs.*
- (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.*
- (4) Minimize energy consumption and vehicle miles traveled.*
- (5) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.*

The Public Safety Element establishes goals, objectives, and policies to minimize potential human injury and property damage by guiding future development to reduce the exposure of persons and property to the above hazards. The policies in this Element are intended to avoid development which would result in unacceptable risks to the residents, visitors, private property, public facilities, and infrastructure in the Coastal Zone; and to minimize risks for existing development already located in hazard areas. Acceptable levels of risk are based on the nature of each hazard, the frequency of exposure, the number of persons exposed, and the potential damage.

The policies in the Public Safety Element are intended to avoid development which would adversely affect existing and future residents, visitors, and property; and to not place an undue financial burden on property owners and taxpayers by allowing development in hazard areas which may have unusually high costs for public services and disaster relief. The Public Safety Element is based on the best available science and information and official data sources to delineate areas potentially at risk from various hazards. It includes maps of known high hazard areas to not only guide development but also to increase awareness of inhabitants and aid in disclosure of potential hazards in real estate transactions.

The Public Safety Element is only one part of a comprehensive countywide approach to address hazards that also includes emergency response plans, pre-disaster preparation and training, pre-disaster mitigation, design and construction standards, and education.

1.2 Relationship to Other Elements

The hazards addressed in the Public Safety Element and the sensitivity of various land uses have been considered in preparing the Land Use Element. Policies in the Land Use Element limits the range of land uses allowed in high hazard areas to reduce the number of people and structures exposed to risk. The Public Safety Element policies are also coordinated with the policies of the Open Space and Resource Conservation, Public Facilities and Services, Circulation and Transit, and Land Use Elements.

1.3 Relationship to Other Plans and Regulations

The Local Coastal Plan, and Coastal Zoning Ordinance that implement it, are not the only means to minimize risks to public safety and property from hazards in the Coastal Zone. Local Coastal Plan policies are intended to be complementary to federal, state, and local laws, regulations, and plans that impose siting and design or other regulatory requirements to minimize risks from natural hazards to public safety and property and increase community resilience to these hazards. Implicit in the Public Safety Element is

the assumption that the County will continue to comply with these laws, regulations, and plans.

1.3.1 United States Coast Guard Sector San Francisco Area Contingency Plan

The Federal Water Pollution Control Act (Clean Water Act) prohibits discharges of oil and hazardous substances into or upon the Nation's waterways, shorelines, and adjoining areas. The Act mandates development of a National Contingency Plan, providing for coordinated federal response to releases of such materials. The Act also provides for the preparation of Area Contingency Plans (ACPs) for specific geographic regions.

The Sector San Francisco ACP covers the land masses and waters of Northern California, including Sonoma County and describes the authorities, roles, and responsibilities of parties involved in National Contingency Plan development and implementation. The ACP includes an inventory, along with maps and descriptions where appropriate, of notable sensitive resources that could be damaged by a release of oil or other hazardous material. The inventory includes biological and cultural resources at dozens of sites along the Sonoma Coast. For each site, the ACP describes resources of concern, known natural hazards in the area, response strategies specific to the site, and an overview of response logistics.

The U.S. Coast Guard has authority and jurisdiction to coordinate spill responses within the Coastal Zone. In the event of a spill or release, a U.S. Coast Guard representative, or Federal On-Scene Coordinator, evaluates the severity of the event and coordinates the response with other federal, state, and local agency representatives, in accordance with the ACP and other applicable plans, laws, and regulations. Sonoma County Departments that could be involved in the response effort include the Fire and Emergency Services Department, Sheriff's Office, and Department of Health Services, among others.

1.3.2 Sonoma County Hazard Mitigation Plan

The Federal Disaster Mitigation Act of 2000 requires local governments to adopt and implement a local hazard mitigation plan in order to be eligible for various types of pre-disaster and post-disaster community aid and grant programs from the Federal Emergency Management Agency (FEMA). Unlike an emergency response plan, a hazard mitigation plan focuses on identifying mitigation actions that can be taken before disasters occur to reduce the level of property damage, personal injury, and community disruption that might otherwise result. It is based on the premise that many of the

losses that could result from hazards could be avoided, prevented, or minimized through better planning, construction, design, and education.

In April 2017, the County adopted the most recent Sonoma County Hazard Mitigation Plan (Hazard Mitigation Plan) to help reduce the level of injury and property damage resulting from hazards including seismic hazards, landslides, floods, wildfires, and hazards resulting from climate change. The Hazard Mitigation Plan also addresses erosion, erosion is the loosening and transportation of rock and soil debris by wind, rain, or other running water or the gradual wearing away of the upper layers of the earth, sea-level rise, and tsunami, as secondary hazards. The Hazard Mitigation Plan includes hazard maps and a five-year implementation plan. The implementation plan identifies community policies, actions, and tools to reduce the public's exposure to hazards, minimize potential property damage and disruption, and reduce the costs of disaster relief. The Hazard Mitigation Plan implementation plan as amended is incorporated by reference into this Public Safety Element to ensure consistency as it is updated and revised every five years.

1.3.3 Sonoma County Climate Action Plan

Sonoma County has long recognized the need for local action to help meet the global challenge of climate change. In July 2016 the Regional Climate Protection Authority adopted the *Climate Action Plan 2020 and Beyond (Climate Action Plan 2020)*. The Climate Action Plan 2020 recommendations will be implemented by local jurisdictions.

The Climate Action Plan 2020 is the outcome of a coordinated, multi-partner planning effort to reduce greenhouse gas emissions in Sonoma County. It builds on previous efforts, and provides a framework for implementing measures to reduce greenhouse gas emissions adopted by the County and the nine cities.

The Climate Action Plan 2020 contain regional and project-level measures to support the County's effort to achieve the reaffirmed statewide reduction targets of 25 percent below 1990 levels by 2020, with long- term goals of 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. It includes a backcast of 1990 greenhouse emissions and a robust inventory of 2010 levels.

1.3.4 California Environmental Quality Act

Under the California Environmental Quality Act (CEQA), prior to any action on a project subject to CEQA, the lead agency which is the public agency that has the principal responsibility for carrying out or approving a project, must prepare an analysis of the impacts of the proposed project. The analysis must include an assessment of whether it

would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure; landslide; flooding in the 100-year floodplain; inundation by a seiche, tsunami, or mudflow; or hazardous materials. A seiche is a standing wave that oscillates in a lake as a result of seismic or atmospheric disturbances creating huge fluctuations of water levels. A seiche has to occur in an enclosed body of water such as a lake, bay or gulf. The hundreds year flood is the magnitude of a flood expected to occur on the average every 100 years, based on historical data. The 100-year flood has a 1/100, or one percent, chance of occurring in any given year.

The assessment must identify potential mitigation measures and project revisions or alternatives which may be considered to reduce the risks from such hazards to a level of less than significant. Most development projects in the Local Coastal Zone are subject to analysis under CEQA.

1.3.5 Other Laws and Regulations

A number of other state and federal laws and regulations complement the Local Coastal Plan's public safety intent by establishing siting constraints, study requirements, and building standards for specific types of development such as essential services buildings, dams, schools, hospitals, power plants, pipeline and transmission lines, and water supply and water treatment facilities. In addition, new construction in the Coastal Zone must comply with and meet the applicable standards of the California and Sonoma County Building Codes to increase resistance to or reduce risks from seismic events, geologic hazards, flooding, fires, and hazardous materials. The County will continue to apply and enforce all applicable design and siting requirements established by state and County Codes to increase the safety and disaster resistance of new or existing buildings whether private or public through the permit review process.

1.4 Scope and Organization

Goals, objectives, and policies applicable to risks from all general types of hazards are in Section 2, followed by sections on the specific hazard types – Geologic Hazards (Section 3), Flood and Inundation Hazards (Section 4), Sea Level Rise Hazards (Section 5), Wildland Fire Hazards (Section 6), and Hazardous Materials (Section 7). Each of these sections summarizes the extent of the hazard and the risk to public safety and property; and includes goals, objectives, and policies to reduce the exposure of persons and property to the hazard. Programs needed to implement proposed policies are also identified. In addition, the Element calls out ongoing or potential future County

initiatives, referred to as "Other Initiatives," that support public safety and promote inter-agency and community collaboration.

1.5 Determination of Acceptable Risks

Acceptable levels of risk are based upon the nature of each hazard, the frequency of exposure, the number of persons exposed, and the potential damage. The County is not able to guarantee that any particular development will not, at some time in the future, be adversely affected by the hazards identified in this Element because such hazards, by their nature, defy precise prediction. Acceptable levels of risk may vary depending on the type of hazard, degree of certainty of hazard exposure, and state of existing development. Acceptable risk can only be determined after all effort has been made to reduce the risk and does not include development that increases known risks to human health and safety in identified hazard areas.

Maps included in the Public Safety element are for illustrative purposes only and are not a suitable basis for parcel-specific decisions. The map scale and reproduction methods limit precision in physical features displayed. The parcels boundaries and physical features are not intended to represent surveyed data. Site-specific studies are required to draw parcel-specific conclusions.

Although there are significant regulatory requirements and controls to regulate the location and design of new construction or development and minimize the hazard risks to acceptable levels, it may not be possible to reach the same level of hazard avoidance or risk reduction for existing development, which has already been located in hazard areas or constructed prior to the enactment of applicable building and zoning codes designed to minimize hazard risk and vulnerability. Additionally, many sites within the coastal zone are subject to potential risks for multiple hazards, as such policies for all of the applicable hazards must be addressed, with the most restrictive or specific regulation applied.

Even with adequate planning, regulation, and mitigation, natural hazards and disasters cannot be prevented from occurring and the risk of impacts from such events cannot be eliminated altogether. Natural hazards and disasters will continue to occur. Although the County will take actions to guide future development, considerable development has already occurred in areas subject to hazards. The County will work to increase public and private disaster preparedness and response and plan accordingly to reduce the potential for harm and damage from such events, however, the potential for significant harm and damage arising from natural hazards and disasters remains.

Existing development and future development potential of parcels may be lost as a result of natural hazards and disasters. There is no obligation on the part of the County to compensate property owners for their losses or to allow rebuilding and development on parcels which cannot meet current building and zoning standards.

2. GENERAL HAZARDS POLICY

GOAL C-PS-1: **Prevent unnecessary exposure of people and property to risks of injury or damage from earthquake, geologic, flood, inundation, and wildland fire hazards and hazardous materials.**

Objective C-PS-1.1: Comply with all applicable land use, building, and development regulations codified by federal, state, and local government to minimize risks of personal injury and property damage from hazard events.

Objective C-PS-1.2: Make fully-informed decisions on land use, development, and real estate regarding hazards through the use and dissemination of the best available science, information, and analysis.

Objective C-PS-1.3: Implement pre-disaster mitigation actions identified in the most recent California Governor's Office of Emergency Services approved Hazard Mitigation Plan implementation plan to help reduce the level of risk and the level of personal injury and property damage that could result from hazards.

Objective C-PS-1.4: Minimize public costs for development in high hazard areas that are associated with high costs for public services and disaster relief.

The following policies, in addition to those in this Public Safety Element and the Open Space and Resource Conservation, Water Resources, and Land Use Elements shall be used to achieve these objectives:

Policy C-PS-1a: Continue to apply, update, and enforce all applicable design, siting, and construction requirements and standards established by federal, state, and the County government to increase the safety and natural disaster resistance, resilience, and accommodation of new or existing public or private buildings through the permit review process. Where a parcel is subject to multiple hazards the most restrictive or specific regulation will be applied. **(New/GP2020)**

Policy C-PS-1b: Make natural hazard maps, data, and information available for public use and review at the County permit office and County website. Provide maps, data, and information in order to guide land use, development, and real estate decisions that

affect risks to public safety and property from natural hazards. Post notices at the offices of the Sonoma County Recorder, Sonoma County Assessor, and Permit Sonoma that identify the location of these maps, data, and information.

Update hazard data as necessary to reflect any changes made by various responsible agencies including, but not limited to, the FEMA, United States Geological Survey (USGS), California Geologic Survey and /or California State Geologist, National Oceanic and Atmospheric Administration (NOAA), and California Department of Forestry and Fire Protection (CAL FIRE). In the event of conflicting information among these sources, Permit Sonoma staff shall determine which is most appropriate. Provide locally generated hazard data to these agencies involved in hazard mapping. **(New/GP2020)**

Policy C-PS-1c: Use and consider available natural hazard data, maps, analyses, and impact and vulnerability assessments from appropriate agencies; and require preparation of additional site-specific or project-specific hazards analyses when necessary to ensure full consideration of risks from natural hazards in the design and development review processes. **(New/GP2020)**

Policy C-PS-1d: Where new hazard data or information, analyses, or maps become available as a result of agency research, database updates, or more detailed site specific analyses, the best available science and information shall be used and considered consistent with the Local Coastal Plan even if it departs from the hazard maps and policies adopted with the Local Coastal Plan. **(New)**

Policy C-PS-1e: Where there is a significant factual question about whether a particular development has sufficiently mitigated the potential risks from natural hazards to an acceptable level, the applicant shall provide evidence that the development would not cause damage or substantial adverse impacts on coastal resources. If the development is consistent with the Local Coastal Plan, and the property owner wishes to proceed in the face of a factual question regarding risks from natural hazards, the property owner shall provide indemnification to the County, insurance or other security, and a recorded notice which will protect the interests of the County and notify future purchasers of the property of the potential problem. **(New/GP2020)**

Policy C-PS-1f: Property owners shall be responsible for conducting their own research, and determining, and understanding the vulnerabilities and risks to their real estate investments from hazard events. Property owners shall be encouraged to develop an emergency response plan and mitigation plan to address those hazards before emergency conditions occur, and to carry their own hazards insurance. In developing such plans, property owners shall be encouraged to consider the FEMA's National Flood

Insurance Program and Community Hazard Rating System, as well as the State of California Multi-Hazard Mitigation Plan. **(New)**

Policy C-PS-1g: Where existing development is located in a natural hazard area and is destroyed by a hazard event, there is no inherent public obligation to allow redevelopment or rebuilding which cannot meet current health and safety Codes and standards or to compensate the owner for the loss of their investment. **(New)**

Policy C-PS-1h: Land divisions, shall be prohibited unless all proposed parcels can be demonstrated to be safe from flooding, erosion, fire and geologic hazards; would not require the construction of shoreline protective devices; and can accommodate a safe, all-weather access. **(New)**

Policy C-PS-1i: Facilitate response and recovery from natural hazard events by improving the ability of public infrastructure and facilities to withstand and remain functional after hazard events. Where necessary, retrofit, replace, or relocate existing infrastructure and facilities to avoid unreasonable risks from hazards. **(New)**

3. GEOLOGIC HAZARDS POLICY

3.1 Background

Geologic hazards result from large scale seismic events and localized occurrences of expansive soils, slope instability, landslides, mudslides, subsidence, and coastal bluff erosion.

3.1.1 Seismic Hazards

Earthquakes are usually caused by sudden movement along geologic faults. Sonoma County has four active or potentially active earthquake faults within its boundaries identified by the state Alquist-Priolo Earthquake Fault Maps. Known geologic faults, including the San Andreas Fault system, within the 10 SubAreas of the Coastal Zone are shown on **Figures C-PS-1a-c**.

While a seismic event along any fault in the county could result in noticeable impacts along the Sonoma County coast, a seismic event along the Northern Segment of the San Andreas Fault system would be expected to have the greatest potential impact in the Coastal Zone due to the potential for surface fault rupture and violent ground shaking. As shown on Figures C-PS-1a-c, this fault generally lies off the west coast of the County. The fault crosses land at Bodega Bay, passes offshore, then crosses land again at Fort Ross running northward, through the Sea Ranch community, and continuing north into Mendocino County. Analysis of seismic data indicates that 8.5 magnitude earthquakes can

be expected along the San Andreas Fault, and that earthquakes of 8.0 or more along this fault can be expected every 200 to 400 years (Prentice, 1989).

The adverse effects of earthquakes result from the physical effects of ground shaking, surface fault rupture, liquefaction, and earthquake-induced landslides; or secondary effects such as fires, tsunamis, seiches, dam failure, and hazardous materials releases. Each of these effects is briefly discussed below.

Ground shaking. Ground shaking from earthquakes affects the greatest number of people and can cause the most damage of any geologic hazard. According to the *California Hazard Mitigation Plan*, damage due to ground shaking produces over 98 percent of all building losses in a typical earthquake. During an earthquake, the ground can shake for a few seconds or over a minute. The amount (strength and duration) of ground shaking is affected by many factors. Distance from the earthquake epicenter, the point on Earth's surface directly above the focus point of where the earthquake is originating underground, is the most significant factor. However, geologic conditions and the direction, magnitude, and depth of the fault rupture are also critical. Shaking, particularly horizontal shaking, results in the most earthquake damage because structures often have inadequate resistance to this type of motion. Unconsolidated and poorly consolidated alluvium, which is detrital materials such as clay, silt, sand, or gravel that has been deposited by running water, and terrace deposits will undergo greater ground shaking than consolidated bedrock formations. Unstable slopes also may undergo greater ground shaking, increasing the risk of landslides after an earthquake event. Figures C-PS-1a-c show ground shaking hazard potential on the Sonoma County coast based on maps produced by the California Geological Survey.

Ground Failure. Strong ground shaking during earthquakes can also result in ground failure. This risk increases with earthquake magnitude and ground shaking intensity but is also influenced by other factors such as slope, ground moisture, and the type and content of bedrock. Ground shaking on gentle and moderate slopes of poorly consolidated surface deposits can result in differential compaction, settlement and liquefaction. Liquefaction occurs when a saturated or partially saturated soil substantially loses strength and stiffness in response to an applied stress such as shaking during an earthquake or other sudden change in stress condition, in which material that is ordinarily a solid behaves like a liquid. Damage from ground shaking can be increased by liquefaction and landslides. Liquefaction changes water-saturated soil to a semi-liquid state, removing support from foundations and causing buildings to sink. The most likely areas to experience liquefaction are valleys and tidal marshes with high water tables and sandy soils. Landslides, mudflows, and rock falls can result from

ground shaking and are most common on steep slopes but may also occur in areas of gentle slopes due to liquefaction of subsurface materials.

Ground Displacement along Faults. Surface fault ruptures can result from large magnitude earthquakes. Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface. Structures located within the fault rupture zone are subjected to excessive force. Most structures are not designed to withstand such large deformations and experience major damage. Pipelines crossing the fault zones can also be damaged by ground failure. During the 1906 earthquake, horizontal displacement along the San Andreas Fault averaged 15 feet in Sonoma County. Hazards from surface fault ruptures are generally avoided or minimized by limiting development in active fault zones in compliance with the Alquist-Priolo Earthquake Fault Zoning Act discussed in Section 3 (Geologic Hazards, Regulatory Setting).

Secondary Effects of Earthquakes. Earthquakes can result in additional property damage and human injury from secondary effects. Some earthquakes can result in large tsunami waves along the ocean shoreline or seiches on lakes which can cause damage by their force and by inundation of low-lying developed areas adjacent to the shoreline. Tsunamis and seiches are discussed in greater detail in Section 4 (Flood and Inundation Hazards). In addition, damage to utilities and other public facilities can produce disastrous secondary effects. Much of the destruction from the 1906 earthquake in Sonoma County was from fires that could not be put out due to broken water lines, damaged roads, and lack of communication. In addition, seismic events could trigger slope failure resulting in landslides which block or damage roads and infrastructure. Risks resulting from the secondary effects of earthquakes can be reduced by various methods, but locating essential facilities and dense populations within high hazard areas increase the potential for damage.

3.1.2 Other Geologic Hazards

The Sonoma County coast has other geologic hazards in addition to those arising from seismic events, which include expansive soils; slope instability, which can result in landslides; and coastal bluff erosion. Erosion is the loosening and transportation of rock and soil debris by wind, rain, or other running water or the gradual wearing away of the upper layers of the earth. Each of these hazards is discussed below. However, unlike other coastal communities, Sonoma County does not experience significant beach sand erosion issues.

Expansive Soils. Buildings, utilities, and roads can be damaged by underlying soils rich in clay that swell each winter and shrink each summer depending on rainfall. This is

a less obvious geologic hazard than earthquakes or landslides, but the gradual cracking, settling, and weakening of buildings over time could be significant.

Slope Instability. Slope instability includes landslides and other shallow soil slippage events that involve various forms of mass earth and rock movement downslope. The most common type of slope instability in Sonoma County is landslides. Landslide potential is generally greater on areas of steeper slope and can be triggered by heavy rainfall; earthquakes; road cuts; and construction activities such as grading and filling, placing culverts, and installing septic tanks. Logging, grazing, and removing vegetation may also adversely affect slope stability. Landslides and shallow soil slippage are prevalent in the Coastal Zone. **Figures C-PS-2a-c** show the areas on the Sonoma County coast subject to slope instability.

Landslides and coastal bluff erosion play a role in threatening development along the Sonoma County coastline. Development of homes, septic systems, landscape irrigation, and drainage as well as heavy rainfall and tidal action impact the rate of coastal erosion. Intensive grazing, tilling of slopes, and road construction have resulted in erosion on the Sonoma County coast through shallow slippage, gullying, sheet wash, and wind action. Ongoing coastal erosion has contributed greatly to historic sedimentation of Bodega Harbor, the Estero Americano, and other water bodies. State Highway 1 on the North Coast experiences landslides and erosion to the extent that the road is frequently closed for repair.

Coastal Bluff Erosion. According to the National Academy of Sciences (2012), most of the damage along the California coast is caused by storms, particularly by the confluence of large waves, storm surges, and high astronomical tides during a strong El Niño event; and a rising sea level would magnify the impacts of high waves and storm surges on the coastline. Storms and sea level rise are causing California coastal bluffs, beaches, and dunes to retreat at rates from a few centimeters to several meters per year. Coastal bluff erosion could increase abruptly from an episodic event such as a tsunami or an unusually severe winter storm. The National Academy of Sciences (2012) projects that California coastal bluffs could retreat more than 100 feet by 2100.

While the entire Sonoma Coast is subject to high rates of erosion and frequent landslides, the greatest hazards located between Bodega Bay and the Russian River. This section of the coast is characterized by a broad coastal prairie terminating in a steep bluff that drops 50 to 100 feet down to narrow rocky beaches. In the early 1900's the Bodega-Jenner Highway, later to become Highway 1, was constructed along the western edge of the coastal prairie. Beginning in the late 1920's, hundreds of small parcels were created in the land west of Highway 1 and sold as vacation home sites.

The majority of this development occurred before passage of the Coastal Act, with a substantial number of homes constructed before Sonoma County first required building permits in 1963.

Geologically, the coastal prairie is a thick layer of Franciscan mélange, which is highly fractured, easily erodible, and unstable. The combination of weak bedrock geology, high rainfall, and direct exposure to storm waves generates one of the highest rates of shoreline retreat in California. As bluff retreat began to threaten existing development west of Highway 1, property owners modified drainage and armored the shoreline, which failed to protect homes and actually accelerated erosion rates.

As of 2019, the greatest hazards from coastal erosion are at Gleason Beach, north of Scotty Creek. When these lots between Highway 1 and the ocean were created in 1927, the average lot was 300 feet deep. Twenty-one homes were developed on these lots. Over time, the ocean eroded the shoreline and finally reached the homes during the winter of 1997-1998, when development was severely damaged by storm wave run up. By February 2006, bluff retreat had reached the developed portions of the lots and five homes partially collapsed and were demolished. By the spring of 2017, only seven houses remained, and the edge of the bluff reached the fog line on Highway 1. Recognizing that previous attempts to stabilize Highway 1 were unsuccessful, Caltrans is now planning to realign this section of Highway 1 approximately 450 feet inland from the current location. The strategy of planned retreat, rather than hardening shoreline protections, will likely be applied more frequently as sea level rise, climate change, and erosion continue to threaten development west of Highway 1. In addition to the risk to existing development, public safety for people accessing the beach would also be at risk from coastal bluff erosion. If official or prescriptive paths or trails to the beach are eroded, people may decide to use unofficial or non-prescriptive routes over unstable bluffs to reach the beach.

Avoidance is the preferred method for minimizing the risk to and vulnerability of development from coastal bluff erosion. In cases where existing development is threatened, the first priority should be to evaluate the feasibility of relocating the development. Only when all other options are deemed infeasible should shoreline protection structures be considered. By appropriately siting new development, the need for a seawall, revetment, or other shoreline protection structure or alteration to the coastal bluff may be avoided.

If a bluff is determined to be stable, the setback from the top of the bluff should be calculated by the bluff retreat times the life expectancy of the house or building to be protected. If the bluff is determined to be unstable, a buffer should be added as a

safety factor to the setback from the top of the bluff. The buffer should be calculated through a site-specific quantitative slope stability analysis that incorporates historic data. However, due to the unpredictability of episodic erosion, a minimum buffer from the setback from the top of the bluff would be appropriate in all cases.

For purposes of this Local Coastal Plan, the terms bluff, bluff edge, bluff top, embankment, and blufftop redevelopment all have specific meanings, which are defined below and in the Glossary.

Bluff: A high bank or bold headland with a broad, precipitous, sometimes rounded cliff face overlooking a plain or body of water. A bluff may consist of a steep cliff face below and a more sloping upper bluff above.

Bluff Edge: The line of intersection between the steeply sloping bluff face and the flat or more gently sloping bluff top; or the upper termination of a bluff, cliff, or seacliff. In cases where the top edge of the bluff is rounded away from the face of the bluff as a result of erosion processes related to the presence of the steep bluff face, the bluff line or edge shall be defined as that point nearest the bluff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the bluff. In a case where there is a step-like feature at the top of the bluff face, the landward edge of the topmost riser shall be taken to be the bluff edge. Bluff edges typically retreat landward due to coastal erosion, landslides, development of gullies, or by grading (cut). In areas where the bluff top or bluff face has been cut or notched by grading, the bluff edge shall be the landward most position of either the current or historic bluff edge. In areas where fill has been placed near or over the historic bluff edge, the original natural bluff edge, even if buried beneath fill, shall be taken to be the bluff edge.

Bluff Top: The upper surface of a bluff or cliff.

Blufftop Redevelopment: Structures located between the sea and the inland extent of the sea and the first public road paralleling the sea (or lagoon) that consist of additions, exterior or interior renovations, or demolition of an existing blufftop home or other principal structure which result in:

- (1) Alteration of 50 percent or more of an existing structure, including but not limited to, alteration of 50 percent or more of the roof, foundation, exterior walls, interior load-bearing walls, or a combination of both types of walls, or a 50 percent increase floor area; or
- (2) Demolition, renovation or replacement of less than 50 percent of an existing structure where the proposed remodel would result in cumulative alterations exceeding 50 percent or more of the existing structure taking into consideration previous additions approved on or after the effective date of the Coastal Act (January 1, 1977).

3.2 Regulatory Setting

3.2.1 Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface fault rupture by preventing the construction of buildings used for human occupancy on the surface trace of active faults. The Act does not address hazards associated with earthquakes such as ground shaking, landslides, or liquefaction.

Alquist-Priolo Earthquake Fault Zoning Act requires counties to designate Earthquake Fault Zones where movement of the earth's surface has taken place during the last 11,000 years; and to require a geologic report for projects proposed within these zones. The State Geologist has identified active faults and mapped Earthquake Fault Zones around the surface traces of the faults. The maps are provided to local agencies which must regulate development projects within the Earthquake Fault Zones. Figures C-PS-1a-c show the San Andreas Earthquake Fault Zones along the Sonoma County coast.

3.2.2 Seismic Hazards Mapping Act

The 1991 Seismic Hazards Mapping Act seeks to protect the public from the hazards caused by earthquakes. The Act requires the State Geologist to delineate and designate areas subject to strong ground shaking, landslides, and liquefaction as Seismic Hazard Zones; and for the California Geological Survey to prepare maps of these Hazard Zones. Counties must regulate certain types of development projects and withhold the development permits for sites within Seismic Hazard Zones until the geologic and soil conditions of the project site are investigated and appropriate mitigation measures, if any, are incorporated into the project plans. Counties must also take these Seismic Hazard Zones into account when adopting and revising land use planning and permitting ordinances and reviewing building permits. California Civil Code Sections 1103-1103.14 require disclosure through a Natural Hazard Disclosure Statement in real estate transactions if the property is located in an Earthquake Fault Zone or Seismic Hazard Zone.

3.2.3 Other Seismic Safety Regulations

In addition to the above, several other seismic safety regulations have been developed over the last century. A summary of these regulations is provided below:

- (1) The 1933 Field Act and Other School Seismic Safety Legislation requires thorough reviews of plans, strict inspections, and quality control standards for school construction.

- (2) The 1968 Geologist and Geophysicist Act requires geologic or seismic assessments to be carried out by qualified geologists and geophysicists.
- (3) The 1973 Alfred E. Alquist Hospital Seismic Safety Act requires all hospitals built after 1973 to be built to higher seismic standards so they can be reoccupied and remain functional after major earthquakes.
- (4) The 1979 Beverly Act authorizes creation of a Geologic Hazard Abatement District (GHAD) as a means to reduce geotechnical problems associated with development in geologically active areas such as erosion and failure of coastal bluffs. A GHAD is an independent public entity (public agency) formed as a Board of Directors which oversees the prevention, mitigation, and abatement of geologic hazards. Funding of a GHAD is through supplemental property tax assessments. A GHAD was proposed for shoreline protection and bluff stabilization for the Gleason Beach community in 2003, but was not adopted.
- (5) The 1986 Unreinforced Masonry Building Act requires local jurisdictions to address the life safety risks posed by Unreinforced Masonry (URM) buildings that were constructed before the adoption of seismic-resistant building codes.
- (6) The 1986 Essential Services Building Seismic Safety Act requires that essential services buildings be designed and constructed to be capable of providing essential services to the public after a disaster.

3.2.4 Shoreline Protection Structures

Seawalls and other shoreline protection structures are hardened structures installed along the coast which provide a physical barrier that armors and stabilizes the shoreline landward of the structure from the erosive forces of wave action. Shoreline protection structures are typically installed by private landowners or local, state, and federal governments in order to provide stabilization and protection of coastal development from floods, storms, and sea level rise. The use of shoreline protection structures is acceptable in some circumstances to serve coastal-dependent uses or to protect existing structures or public beaches when designed to eliminate or mitigate adverse impacts.

Although shoreline protection structures can be used to protect coastal development they are not appropriate to use in most circumstances due to the large amount of adverse environmental impacts that they generate. Shoreline protection structures prevent beaches from migrating inland and induce erosion in adjacent unprotected shoreline. These structures also have adverse impacts on recreational beach uses, scenic resources, and the natural supply of sand to shoreline areas. Shoreline protection structures also have a reality short structural lifespan relative to the high cost of installing and removing the structures. Despite the significant cost of installation, there are instances where the performance of such structures has been inadequate and the

erosion and damage they were installed to prevent or reduce still occurs. Remnants of failed shoreline protection structures and collapsed private buildings degrade the natural beauty of the Sonoma County coastline. Clean-up of these structures on the beach can pose a problem due to the high cost of funding a full clean-up or if equipment access to the beach is limited.

Section 30235 of the California Coastal Act allows seawalls and other shoreline protection structures only to protect existing development or public beaches or to serve coastal-dependent uses, and only in certain situations. Section 30610 allows reconstruction of a shoreline protection structure destroyed by a disaster without a coastal permit under certain conditions, including where the replacement structure is no more than 10 percent larger than the destroyed structure. Section 30611 allows, in the case of a disaster or other emergency, work to protect life and public property not including permanent erection of structures, valued at more than \$25,000 without a permit.

GOAL C-PS-2: Prevent unnecessary exposure of people and property to risks of injury or damage from earthquakes, landslides, coastal erosion, and other geologic hazards.

Objective C-PS-2.1: Locate and design new development to reduce the risks of human injury and property damage from existing and anticipated geologic hazards, including coastal bluff erosion, to acceptable levels.

Objective C-PS-2.2: Minimize the risks of human injury and property damage from existing and anticipated geologic hazards.

Objective C-PS-2.3: Minimize the need to construct seawalls or other shoreline protection structures to reduce impacts to natural shoreline processes, cultural and biological resources, views, and coastal access.

The following policies, in addition to those in this Public Safety Element and the Open Space and Resource Conservation, Water Resources, and Land Use Elements shall be used to achieve these objectives:

Policy C-PS-2a: Design and construct all structures for human occupancy, including mobile homes, in accordance with Zone 4 standards of the Uniform Building Code. **(Existing LCP)**

Policy C-PS-2b: Enforce the geologic provisions of Chapter 70 of the Uniform Building Code. **(Existing LCP)**

Policy C-PS-2c: Encourage strong enforcement of seismic safety requirements and regulations for design and construction of buildings and facilities subject to state and

federal standards, such as bridges, dams, power plants, hospitals, schools, and essential services buildings. **(GP2020)**

Policy C-PS-2d: Structures intended for human occupancy as defined in the Alquist-Priolo Special Studies Zones Act and related Administrative Code provisions shall be prohibited within 50 feet of the surface trace of any fault in Earthquake Fault Zones. **(GP2020)**

Policy C-PS-2e: Encourage the consolidation of lots and new structures in high hazard areas. **(Existing LCP Revised)**

Policy C-PS-2f: A site-specific geologic hazards report prepared by a licensed Geotechnical Engineer, Engineering Geologist, or Geophysicist shall be required for development projects proposed within Geologic Hazard Areas, as shown in **Figures C-PS-1a-cand C-PS-2a-c**. A geologic hazards report shall also be prepared where a site evaluation conducted for a Coastal Permit, building permit or grading permit application has identified that such a report is required. The geologic hazards report shall include the following information:

- (a) Description of the types and locations of the geologic hazards on the project site.
- (b) Analyses of the risks of human injury and property damage from geologic hazards associated with the proposed development, including but not limited to site preparation, grading, installation of septic systems, installation of drainage and road improvements, construction of foundations, and construction of buildings and structures.
- (c) Design siting and construction mitigation measures for the proposed development to minimize the potential for collapse; debris falling on occupants or pedestrians; failure of critical mechanical or electrical systems; releases of large quantities of hazardous or toxic materials; and substantial economic loss from geologic hazards.
- (d) Certification from the Geotechnical Engineer, Engineering Geologist, or Geophysicist that the risks of human injury and property damage from geologic hazards associated with the proposed development have been mitigated to an acceptable level. **(New)**

Policy PS-2g: As a condition of coastal permit approval for development in mapped Hazard Areas, require the applicant to record a document exempting the County from liability for any personal or property damage caused by natural geologic or other hazards on such properties and acknowledging that future shoreline protective devices to protect structures authorized by such coastal permit during the structure's economic life are prohibited. **(New)**

Policy C-PS-2h: Incorporate measures to mitigate to an acceptable level identified geologic hazards for all County road, public facility, and other projects. **(GP2020)**

Policy C-PS-2i: Applications for new development or redevelopment on coastal bluff property shall be required to include a site-specific coastal bluff erosion hazards report from a licensed Geotechnical Engineer, Engineering Geologist, or Geophysicist that establishes a geologic setback line for proposed new temporary (e.g., gazebos and portable spas) and permanent (e.g., roads, driveways, water lines, drainage improvements, and septic systems and leachfields) structures and infrastructure. This setback shall be no less than 100 feet and shall establish where on the bluff top stability can reasonably be assured for the economic life of the development (no less than 100 years). All new structures for human occupancy and infrastructure located on a bluff top shall be setback to ensure that it will not be endangered by coastal bluff erosion, retreat, and collapse; and thereby avoid the need for shoreline protection devices during the economic life of the development. The effect of any existing shoreline protective devices shall not be factored into the required stability analysis.

The coastal bluff erosion hazards report shall take the following factors into account in establishment of the geologic setback line:

- (1) Proposed extent of grading and site preparation.
- (2) Proposed plans for construction of roads, driveways, foundations, water lines, drainage improvements, and septic systems and leachfields.
- (3) Maximum coastal bluff retreat projected to occur within the economic life of the development (100 years). The projected coastal bluff retreat shall be calculated considering the specific geologic and hydrologic conditions on the site; historic coastal bluff retreat data; projections for future sea level rise according to the most up-to-date science; and existing and projections for changes in storm frequency, magnitude, and duration due to climate change. **(New)**

Policy C-PS-2j: Where existing development is threatened by coastal bluff erosion, the first priority shall be to evaluate the feasibility of relocating the development. The second priority shall be to consider the feasibility of less environmentally damaging alternatives than shoreline protection structures. Only when all other options are deemed infeasible should shoreline protection structures be considered. **(New)**

Policy C-PS-2k: Where, as a result of coastal erosion, it is no longer feasible based on size and environmental conditions for a parcel to meet the minimum requirements for development under the Sonoma County Code, the development potential of the parcel may be considered lost due to the forces of nature. There shall be no obligation on the part of the County to restore the development potential of such parcels through Code variances, lot line adjustments, transfer of development rights, or other means. **(New)**

Policy C-PS-2l: Avoid shoreline protection device construction, reconstruction, expansion, alteration, and/or replacement unless determined necessary by and compliant with California Coastal Commission and County of Sonoma Standards (**Appendix F**). (**New**)

Policy C-PS-2m: A shoreline protection device shall only be authorized for removal when the protected structure or asset has been removed, or a more appropriate protection option has been identified. In the case of coastal redevelopment, removal of the authorized shoreline protection device shall be required prior to construction of the redeveloped structure. (**New**)

4. FLOOD AND INUNDATION HAZARDS POLICY

4.1 Background

Flooding along rivers and creeks on the Sonoma County coast is a natural, annual phenomenon. Many smaller creeks and drainages along the coast drain smaller areas directly into the ocean without causing the flooding problems that occur on larger watershed basins or river systems. Floods on small streams usually peak and recede quickly, while floods on larger systems like the lower Russian River may not peak for two days or more after the start of a storm and may exceed flood stage for four days or more. In larger drainage basins, streams overflow banks when runoff from the watershed exceeds the capacity of the stream channel to carry the flow. Because the Coastal Zone is a narrow band of land near the coast, most of the flood waters draining to the ocean originate from inland areas outside the Coastal Zone.

Flooding can move, destroy, or damage buildings, roads, infrastructure, and personal property, not only by inundation but also by the force of flowing waters. Flood damage may weaken building materials and increase mildew, mold, bacteria and other disease vectors. Floods can result in human injury and pose a threat to life. Floods can wash away soil, erode banks, destroy crops, and transport loose objects and flood debris downstream; and may end up degrading Sonoma County beaches or offshore marine habitats.

Although floods are primarily associated with the overflow of rivers and creeks, damage from flooding and inundation can also result from dam failure, tsunamis, seiches, ocean surges and higher waves during storms, and sea level rise. Localized flooding can also occur from blocked or undersized storm water conveyance channels and infrastructure.

4.1.1 Stream and River Flooding

Flooding is most often associated with an overflowing stream or river. The floodplain is the area adjacent to the watercourse that is subject to recurring inundation from floods.

The magnitude of floods, can be described in terms of flow (cubic feet per second), elevation (height above a defined datum), or by the areal extent of flood water inundation. However, the more frequent and universal way of describing flood magnitudes is by their projected recurrence level - the bigger the flood, the more years that would typically be expected to pass statistically before it reoccurs. For instance, a flood level that would occur on average once every two years is referred to as the 2-year flood, and it would statistically have a 50 percent chance of occurring in any given year. A 10-year flood has a 10 percent chance of occurrence, a 50-year flood has a 2 percent chance, a 100-year flood has a 1 percent chance, and a 500-year flood has a 0.2 percent chance of occurring in any given year. Although the recurrence level is based on statistical averages, the actual occurrence of flood events varies and could occur at shorter intervals or even within the same year.

Storms are described in the same way - as the storm event of such a magnitude (amount of rainfall during a specified length of time) that it has a certain percent chance of occurring in any given year. For instance, the 100-year flood is the storm event of such a magnitude that it has a 1 percent chance of occurring in any given year. Similarly, the 10-year storm is a storm event of such a magnitude that it has a 10 percent probability of occurring in any given year.

Floodplains or flood zones are described with reference to the associated flood – as the areal extent of land that would be covered by the flood event of such a magnitude that it has a certain percent chance of occurring in any given year. For instance, the 100-year floodplain is the area that would be covered by the 100-year flood.

The FEMA and Federal Insurance Administration have assessed flood hazards for most major streams in Sonoma County. These assessments are periodically updated to reflect new data from flood studies and actual flood events. The FEMA maps show the 100-year floodplain and are commonly used as the primary source of flooding information for planning and development review and floodplain management. Where the subject river or stream has been studied by detailed hydrologic and hydraulic methods, FEMA may also designate a floodway within the 100-year floodplain. According to FEMA, the floodway is “where the water is likely to be deepest and fastest - the area of the floodplain that should be reserved (kept free of obstructions and development) to allow floodwaters to move downstream.” The floodway is generally considered to be the area where the flood risk is highest and the vulnerability of development is greatest.

Currently the Russian River is the only river on the Sonoma County coast for which the 100-year flood plain has been mapped by FEMA, shown on **Figures C-PS-3f-ii, 3g-ii, 3h-ii, and 3j-ii**. It shows the land area adjacent to a watercourse, drainage way, or creek which has been or may be covered by floodwaters. The boundaries of a flood plain are typically described in terms of the magnitude of a flood event such as the "100 year flood plain". Portions of the older unincorporated communities of Duncans Mills and Jenner lie within the 100-year flood zone of the Russian River in the Coastal Zone.

Within the area covered by the 100-year floodplain of the Russian River, the risk of human injury and property damage from flooding increases with the topographic depth, frequency of flooding, and force of the flood current. Properties within the floodway (approximate 10-year floodplain) would be subject to a greater depth and frequency of flooding and greater magnitude of cross currents than properties within the 25-year or 50-year floodplains. Development is prohibited within the river's floodway because the risk of human injury and property damage in this area is unacceptable.

The greatest threat to public safety and property exists where development is located in areas subject to recurring flooding. The Russian River has the highest frequency of flooding and greatest flood hazards in the Coastal Zone due to the size of its drainage basin and the amount of historic development in the floodplain. The Coastal Zone contains only about 237 of the 1,485 square miles (16 percent) of the Russian River Watershed. Therefore, most of the flood waters from the Russian River draining to the ocean originate from inland areas outside the Coastal Zone.

4.1.2 Dam Failure Inundation Zones

Flooding can also result from dam failure. The area of potential inundation resulting from the failure of a specific dam is designated as the Dam Failure Inundation Zone for that dam. The current mapping of dam failure inundation zones in the Coastal Zone shows that the areas which could be inundated by dam failure are already included in the 100-year flood zone. There are no major dams located within the Coastal Zone.

4.1.3 Coastal Flooding and Storm Surge

Areas designated as the VE Zone on FEMA's Flood Insurance Rate Map (FIRM) are considered to be in a Coastal High Hazard Area subject to high velocity waters from coastal flooding, tidal inundation, and tsunamis. However, FEMA has not designated all potential Coastal High Hazard Areas, and is in the process of updating its mapping of these areas.

4.1.4 Tsunamis

A tsunami is a series of traveling ocean waves, generated by a distant or near-shore undersea earthquake or landslide, that decrease in speed and increase in height as they enter shallow coastal waters. If these waves are much larger than usual, they can become a threat to human life and property by the force of the wave as well as by inundation. Following arrival of the first wave, subsequent waves may increase in height and arrive minutes to hours later. Factors influencing the size and speed of a tsunami include the source and magnitude of the triggering event, water depth, offshore topography, onshore topography, and coastline shape.

The National Oceanic and Atmospheric Administration (NOAA) heads the National Tsunami Mitigation Program, a federal and multi-state initiative to address tsunami hazards in the United States. The Program develops tsunami inundation and evacuation maps for at-risk communities. NOAA, the California Emergency Management Agency (CalEMA), California Geological Survey (CGS), and University of Southern California have conducted systematic analyses of all historic and possible tsunami hazards along the coast of California for the purpose of mapping tsunami run-up zones from nearshore events in these at-risk communities. Based on a comparison of historic tsunami events along the west coast of California and consideration of tidal fluctuations and other factors, a maximum tsunami wave height of 21 feet along the Sonoma County coast could be created by a large seismic event. However, given the limits of available data, and the possibility that future events may differ from historic events, it is possible that the actual inundation from a tsunami could be greater than currently projected.

For the purposes of this Local Coastal Plan and the *Sonoma County Operational Area Tsunami Response Plan and Evacuation Plan* (part of the *Sonoma County Hazard Mitigation Plan*), a conservative approach was assumed and a maximum tsunami wave height of 25 feet (7.6 meters) along the Sonoma County coast and 5 feet (1.5 meters) in San Pablo Bay were used to identify potential tsunami inundation areas.

Tsunami inundation maps for the Sonoma County coast and San Pablo Bay were released in 2009. The tsunami inundation zone on the Sonoma County coast is shown on **Figures C-PS-3a-k**. Not all tsunamis will inundate all areas in the potential zone. Some tsunamis may be only a few inches or a few feet and affect only a portion of the potential tsunami inundation zone.

Since most of the County coastline is elevated, most areas along the coast are considered safely out of reach of a potential tsunami wave. However, the low-lying coastal communities along the southern Sonoma County coast extending from Jenner to Bodega Bay have area of significant exposure and risk of human injury and property damage

because they contain low-lying public beaches, parks, and infrastructure; and residential and commercial development. Although there are no known recorded deaths from a tsunami in Sonoma County, there were small impacts from tsunamis in 1946 and 1960.

Under the California Coastal Analysis and Mapping Project (CCAMP), FEMA is initiating flood studies/mapping projects in coastal areas as a result of Congressional appropriations for flood hazards mapping. These efforts will address gaps in required engineering and mapping for high flood risk areas impacted by coastal flooding. The Open Pacific Coast Study is a component of CCAMP that involves detailed coastal engineering analysis and mapping of the Pacific coast of California. Results from the Open Pacific Coast Study will be used to remap the coastal flood risk and wave hazards for fifteen California counties, including Sonoma County.

4.1.5 Floodplain Management

The primary method of reducing the risk of hazards and impacts from flooding is through floodplain management. In addition to mapping flood hazards, floodplain management may include restrictions on the type and location of land uses and development in the floodplain. Land uses which can sustain periodic flooding and decrease flood hazards downstream would be encouraged. Floodplain management may also include establishing development and construction standards that minimize vulnerability to flood hazards, such as requiring the first floor of structures to be one foot above the base flood elevation. Floodplain management may also include increased retention of stormwater runoff in the watershed, acquisition of property in flood hazard zones, public education and outreach, and other methods which reduce the need for costly construction projects and disaster relief.

Floodplain management is required by federal and state law. Various incentives such as flood insurance, loans, and State funding of flood control projects are offered if flood management practices are followed including measures that are taken to increase the hydrologic capacity of a natural water course or to create new man-made channels or reservoirs to drain and contain precipitation that otherwise exceeds the capacity of the water course, in an effort to reduce flood damage, usually to man made improvements. In Sonoma County, floodplain management has reduced flood damage primarily by limiting the kind and extent of new construction in flood hazard areas and by elevating existing structures above the base flood elevation. However, property damage from flooding is still a major and persistent problem along the Russian River, which has resulted in Sonoma County having the highest rate of repetitive property losses from flooding in California; and which indicates that a more proactive approach is needed.

The floodplain policies of this Local Coastal Plan are intended to limit development within 100-year flood plain areas; require compliance with siting, development, and constructions standards to minimize the risk of flood hazards for new development; and collaborating and participating in the County's multi-strategy approach to reduce repetitive flood loss properties and minimize the risks for existing development.

4.2 Regulatory Setting

Section 30253 of the 1976 California Coastal Act, directs that new development minimize risks to life and property in areas of high geologic, flood, and fire hazard. Section 30236 of the 1976 California Coastal Act addresses the situations in which rivers and streams may be substantially altered for flood control projects – only where no other method for protecting existing structures in the floodplain is feasible, and where such protection is necessary for public safety or to protect existing structures.

GOAL C-PS-3: Prevent unnecessary exposure of people and property to risks of human injury and property damage from flooding and other types of inundation hazards

Objective C-PS-3.1: Regulate new development to reduce the risks of human injury and property damage from existing and anticipated flood hazards to acceptable levels.

Objective C-PS-3.2: Minimize risks of human injury and property damage for existing development within flood hazard areas with an emphasis on reducing repetitive property losses.

The following policies, in addition to others in this Public Safety Element and those in the Open Space and Resource Conservation, Water Resources, and Land Use Elements, shall be used to achieve these objectives:

Policy C-PS-3a: Any area that would be inundated by a 100-year flood event shall be considered to be a flood hazard zone. The Flood Insurance Rate Maps (Flood Rate Maps) adopted by FEMA shall be used as the official source of flood elevation data and flood hazard zone mapping and the 100-year flood and to support the National Flood Insurance Program (NFIP) and associated flood insurance studies. Land use planning and development review shall be based on the Flood Rate Maps except where more detailed parcel-specific and site-specific analyses of flood elevations and flood hazard zones based on scaled interpretations of the Flood Rate Maps are available. Where local analyses indicate flood elevations or flood hazard zones which differ from the adopted Flood Rate Maps, such data shall be provided to FEMA so they may be amended.

(New/GP2020)

Policy C-PS-3b: Floodplain management shall be given priority over flood control structures for preventing property damage from flooding, except where the intensity of development requires a high level of protection, justifies the costs of a bank or shoreline protection structure, and such structure complies with requirements of the California Coastal Act and shoreline protection structure requirements of this Public Safety Element. **(GP2020)**

Policy C-PS-3c: Encourage increased stormwater retention and decreased stormwater runoff both within and outside of the Coastal Zone to reduce flooding within the Coastal Zone. Floodplain storage capacity shall be preserved by avoiding fill in areas outside of the FEMA 100-year flood hazard zones which retain or could retain flood waters. **(GP2020)**

Policy C-PS-3d: New development, water diversion, vegetation removal, and grading shall be regulated to minimize any increase in flooding and related human injury and property damage. **(GP2020)**

Policy C-PS-3e: Drainage facilities shall be designed to minimize off-site drainage and flooding according to the most current County flood control and design criteria. Alternative bio-engineered drainage designs (e.g., low impact development techniques) are preferred and shall be proposed where they provide adequate capacity and performance to handle expected stormwater flows. The cost of drainage facilities required to handle stormwater runoff from new development shall be the responsibility of the new development. **(GP2020)**

Policy C-PS-3f: Construction of structures within 100 feet of the top of any natural or manmade embankment which defines a channel shall be prohibited, except where Permit Sonoma finds the flood hazard risk to life and property has been minimized. Reductions to building setbacks in 100-year floodplains shall be avoided. Where this policy conflicts with **C-OSRC-5c(2)** of the Open Space and Resource Conservation Element, the more restrictive of the two shall apply. **(Existing LCP Revised)**

Policy C-PS-3g: Assess potential hazards from proposed development on a case by case basis to ensure that siting, mitigation measures, or design changes are sufficient to reduce exposure to these hazards to an acceptable level. Such assessments shall consider hazards from river and creek flooding, dam failure, storm surge and high waves during storms, sea level rise, and undersized or blocked stormwater facilities. **(New)**

Policy C-PS-3h: New dwellings shall be prohibited in Tsunami Hazard Zones. **(Existing LCP Revised)**

Policy C-PS-3i: Tentative and final subdivision maps and approved site plans shall show areas subject to flooding as designated on the Flood Rate Maps adopted by the FEMA. **(GP2020)**

Policy C-PS-3j: Evaluate potential flood and inundation hazards for development projects relative to potential repetitive property loss, and incorporate mitigation measures to reduce the potential for human injury and property damage to a level of less than significant. Evaluate impacts from sea level rise, and storm inundation events. Consider unique coastal characteristics, infrastructure, and adaptive capacity in project design. **(GP2020 Revised)**

Policy C-PS-3k: Work with County Departments, responsible agencies, public, and other stakeholders to develop and implement a long-term plan for reducing repetitive property losses from flooding as detailed in Policy PS-2d of General Plan 2020. Conduct ongoing flood monitoring, implementation of the Local Hazard Mitigation Plan, consider participation in federal hazard programs. **(GP2020)**

5. SEA LEVEL RISE HAZARDS POLICY

5.1 Background

Sea level rise has been taking place since the end of the last Ice Age, about 20,000 years ago before the beginning of human history. Recent studies suggest that as a result of global climate change, sea level rise will accelerate during the coming decades and increase significantly over the next 100 years.

Sea level rise has been recognized as a significant threat to low-lying coastal areas around the world since the issue of global climate change influenced by human activities emerged in the 1980s. People, property, and biotic resources in low lying coastal areas face a long-term threat of inundation as a result of sea level rise; and the potential damages to property, biotic resources, and infrastructure may be considerable. Many coastal communities and infrastructure will be threatened by increased frequencies and intensities of flooding and gradual inundation as sea level rises. Higher ocean levels will also increase creek and river flooding, coastal bluff and shoreline erosion, and the impacts of tsunamis.

Section 30006.5 of the California Coastal Act identifies sea level rise as one of the topics for which additional scientific and technical analysis and recommendations are necessary to aid coastal planning, conservation, and development decisions. This Local Coastal Plan includes policies to address hazards from sea level rise to enhance the safety of residents and visitors, while providing a framework for consideration and

permitting of coastal development projects. This Local Coastal Plan acknowledges the threat of sea level rise and supports appropriate responses, while recognizing that sea level rise is a global rather than a purely local issue.

5.1.1 California Coast Sea Level Rise

Although global sea level rise has been fairly gradual, Coastal California has experienced noticeable sea level rise for at least the past century. According to the *Safeguarding California Plan: 2018 Update* (California Natural Resources Agency 2018), sea level has risen by an average of about 7 inches along California's 1100-mile coastline during the past century. According to *The Impacts of Sea-Level Rise on the California Coast* prepared by the California Climate Change Center in partnership with the Pacific Institute (Heberger et al. 2009; referred to as the Pacific Institute Report), under medium to medium high levels of greenhouse gas emissions, the mean sea level along the California Coast will rise from 3.3 to 4.6 feet by year 2100.

The best available science and guidance on sea level rise on the Pacific Coast is in *Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future* (National Academy of Sciences 2012; National Academy Report). The National Academy Report clarifies that variation in land motion complicates the issue of sea level rise, because in the immediate future it is relative sea level rise at any particular location along the West Coast, combined with short-term increases in sea level during coastal storms and high tides that matter to individual communities, rather than global sea level rise alone. The National Academy Report found a steep change in projected sea level rise at Cape Mendocino in Humboldt County due to tectonic uplift. The report states that much of the land on the coast north of Cape Mendocino is rising at up to 0.1 inch per year, whereas the land on the coast south of Cape Mendocino is sinking at an average rate of about half that. As a result, relative sea level north of Cape Mendocino has been falling over the past ten decades while the level south of Cape Mendocino has been rising.

Storms and Sea Level Rise. Storms and flooding in California typically occur during the winter from November to April and are influenced by several climate patterns, most prominently the El Niño Southern Oscillation. Every two to seven years, the Southern Oscillation alternates between two phases, La Niña and El Niño. In contrast to La Niña, "El Niño years" generally result in persistently low air pressure, greater rainfall, and high winds.). The water levels reached during these large, short-term events have exceeded mean sea levels projected for year 2100, so understanding their additive effects is crucial for coastal planning.

Low air pressure during a storm causes an immediate rise in sea level above predicted tides, referred to as storm surge. It also increases wind activity, generating erosive waves on top of the already high sea level. This combination of factors during an El Niño event can cause widespread damage in coastal areas. As sea level rises, flooding from storms will become more frequent and potentially more hazardous.

Impacts. Rising sea levels, large coastal storms, and extreme high tides contribute to flooding and erosion that threatens California coastal communities. Rising seas increase the risk of coastal flooding, storm surge inundation, bluff and coastal erosion, shoreline retreat, saltwater intrusion, and wetland loss or migration. The net result of coastal storms and sea level rise is coastline retreat, ranging from a few centimeters per year for bluffs made of resistant bedrock to several meters for beaches and dunes. These rates of coastline retreat will increase with rising sea levels and are likely to further increase if waves become higher (National Academy Report). The impacts of sea level rise will vary according to local factors such as shoreline characteristics and topography, the location and extent of development, and local drainage and wind patterns.

According to the Pacific Institute Report, nearly half a million Californians will be at risk from future sea level rise. California has the nation's largest ocean economy, valued at about \$47 billion/year, with the majority connected to coastal recreation and tourism as well as shipping and ports. Many of the facilities and much of the infrastructure supporting these industries, as well as the state's many miles of public beaches, are within just a few feet of present sea level. Sea level rise will result in more frequent flooding and gradual inundation, as well as increased bluff, dune, and shoreline erosion. This flooding and erosion will affect transportation facilities, utility systems, storm water systems, ports and harbors, large wetland areas, and coastal development (i.e., homes and businesses).

5.1.2 Projected Sea Level Rise on the Sonoma County Coast

Climate change is affecting natural and built systems around the world, including the California coast. In the past century, average global temperature has increased about 1.4°F, and average global sea level has increased 7 to 8 inches. Sea level at the San Francisco tide gauge has risen 8 inches over the past century, and the National Research Council (NRC) projects that by 2100, sea level in California south of Cape Mendocino may rise 66 inches. The Sonoma County Focused Vulnerability Assessment for Bodega Bay research shows that in the worst case scenario, sea-level could rise 78 inches by 2100 as shown in **Table C-PS-1**. The two major causes of global sea level rise are thermal expansion of warming oceans and the melting of land-based glaciers and polar ice caps. While Sonoma County's ocean coast regularly experiences erosion,

flooding, and significant storm events, sea level rise would exacerbate these natural processes, and lead to significant social, environmental, and economic impacts. The third National Climate Assessment cites strong evidence showing that the cost of doing nothing exceeds the costs associated with adapting to sea level rise by 4 to 10 times. Therefore, it is critically important that Sonoma County plan and prepare to adapt to sea level rise to ensure public resources and coastal communities are resilient for present and future generations. Future Development considerations should include future vulnerabilities to sea level rise and corresponding habitat migration.

Table C-PS-1: Focused Vulnerability Assessment Sea Level Rise Projections

Scenario	Projected Sea Level Rise	
	feet	cm
1 - 2016	0	0
2 - 2030	0.83	25
3 - 2050	1.67	50
4 – 2100 Best Case	3.33	100
5 – 2100 Worst Case	6.56	200

Sea level rise inundation maps were prepared for Sonoma County using the Pacific Institute Report's projected sea level rise, together with 100-year fluvial flood events for year 2100. **Figures C-PS-4a-c** illustrate the areas along the Sonoma County coast at risk from erosion, and Figures C-PS-3a-k illustrate the areas at risk from permanent inundation and temporary flooding as a result of sea level rise during a 100-year storm event by year 2100.

Sonoma County Planning staff examined the digital data from the Pacific Institute Report that was used to prepare Figures C-PS-3a-k. **Table C-PS-2** shows, by SubArea, the public roads, State facilities, and County facilities projected to be permanently inundated or temporarily flooded as a result of sea level rise and the 100-year coastal storm event by year 2100. In addition to the public roads and facilities listed in Table C-PS-2, numerous residential, commercial, recreational, and vacant properties and portions of the California Coastal Trail are projected to also be inundated or flooded.

Sea Level Rise Vulnerability Assessment for the Sonoma Coast. In May 2017 Sonoma County completed a sea level rise adaptation planning effort for the Sonoma Coast. The County first conducted a general assessment of the coastal areas, communities, land uses, development, and public facilities most vulnerable to sea level rise impacts to prioritize development of community-specific focused vulnerability

Table C-PS-2: Public Roads, State Facilities, and County Facilities on the Sonoma County Coast Potentially Inundated or Flooded as a Result of Sea Level Rise and the 100-Year Flood by Year 2100

SubArea	Public Roads	State Facilities	County Facilities
1 The Sea Ranch North	Highway 1	<i>Del Mar Landing State Ecological Reserve</i>	<i>Gualala Point Regional Park & Beach</i> <i>The Sea Ranch Access Trails:</i> Bluff-Top; Salal; and Walk-on Beach
2 The Sea Ranch South			<i>The Sea Ranch Access Trails:</i> Shell Beach; Stengel Beach; Pebble Beach; and Black Point Beach
4 Salt Point		<i>Salt Point State Park:</i> Fisk Mill Cove; Gerstle Cove; Horseshoe Cove; Horseshoe Point; Salt Point; and Stump Beach	
5 Timber Cove/ Fort Ross	Highway 1	<i>Fort Ross State Historic Park:</i> Fort Ross Cove; Kohlmer Gulch; Sandy Cove; and Windermere Point	<i>Stillwater Cove Regional Park:</i> Stillwater Cove & Boat Launch; Stillwater Cove Expansion: Pocket Cove and Bluff Trail – Ocean Cove to Stillwater Cove
7 Duncans Mills	Highway 1 Hwy 116 B Street Freezeout Rd Main St Moscow Rd Steelhead Blvd	<i>Sonoma Coast State Park Access Trails:</i> Duncans Mills River; Rancho del Paradiso - Freezeout River; Steelhead Boulevard River; and Willow Creek - Freezeout	
8 Pacific View/ Willow Creek	State Highway 1 Emery Rd Willow Creek Rd Wrights Beach Access Rd	<i>Sonoma Coast State Park & Beach:</i> Arched Rock; Duncans Cove, Point, & Landing; Penny Island; Blind Beach; Furlong Gulch Beach; Goat Rock Beach; Mann Beach; No Name Beach; North Portuguese Beach; Portuguese Beach; Wrights Beach; Monte Rio to Willow Creek Trail; and Willow Creek Campground & River Access Trail	<i>Doran Regional Park & Beach</i>

Table C-PS-2: Public Roads, State Facilities, and County Facilities on the Sonoma County Coast Potentially Inundated or Flooded as a Result of Sea Level Rise and the 100-Year Flood by Year 2100 (continued)

SubArea	Public Roads	State Facilities	County Facilities
9 State Beach/ Bodega Bay	Highway 1 Bay Flat Rd Bean Ave Brooke Rd Churchill St Doran Beach Rd Driftwood Rd Extension–Westshore to Whaleship Roads Maryana Dr Ocean View Ave Shaw Ct Smith Brothers Rd Westshore Rd	<i>Bodega Dunes Campground</i> <i>Sonoma Coast State Park:</i> North Salmon Creek Beach and South Salmon Creek Beach (<i>Doran Regional Park</i> : U.S. Coast Guard facility)	<i>Birdwalk Loop Trail</i> <i>Doran Regional Park & Beach:</i> Doran Beach; Doran Beach Road; Jetty Day Use Area; Miwok Tent Campground; boat launch & parking; and visitor's center/operations <i>Westside Regional Park:</i> boat launch; RV & tent campsites; and parking <i>Mason's Marina, Spud Point Marina, Bodega Bay Sport Fishing Center:</i> onshore facilities
10 Valley Ford	Highway 1 John's St Middle Rd School St (Main St) Valley Ford – Estero Rd Valley Ford – Freestone Rd Valley Ford Rd		<i>Gold Ridge Soil Conservation District Office</i>
Notes: ¹ Pacific Institute Report (Heberger et al., 2009) ² The County's hazards maps and tables can be used as a resource for identification of potential hazard areas and vulnerable properties; however, absence of maps alone cannot be considered absence of hazard, and local site conditions must be examined using the best available science.			

assessments. The *Sonoma County Coast General Vulnerability Assessment* was completed in June 2016. The *General Vulnerability Assessment* depicts the inundation from sea-level rise in 1-foot increments up to 6 feet (2100 scenario). The results are those SubAreas with a relative vulnerability of “high” are Highcliffs/Muniz-Jenner (SubArea 6), Pacific View/Willow Creek (SubArea 8), and State Beach-Bodega Bay (SubArea 9).

Based on these results, the County identified the community of Bodega Bay as the subject for a focused vulnerability assessment. The *Bodega Bay Focused Vulnerability Assessment and Adaptation Strategies* (Vulnerability Assessment) and recommendations are located in **Appendix G**

5.1.3 Exposure to Inundation and Erosion

As part of the Sonoma County coast sea level rise adaptation planning effort funded by the Ocean Protection Council, the Center for Ocean Solutions analyzed the relative exposure of coastline areas to erosion and sedimentation caused by storms, and the role of natural habitat in reducing this exposure (Hartge et. al., 2016a).

The Center of Ocean Solutions (COS) and the National Capital Project (NCP) have conducted spatial analyses areas along the Sonoma County coastline at risk of erosion and inundation caused by storms. In addition, the analyses evaluated the role of natural habitat in reducing coastal exposure in Sonoma County. The information below summarizes the findings for the spatial analyses under a 2030 sea level rise scenario (National Academies of Science, 2012).

Figures C-PS-4a-c depict the findings of the analyses of coastal exposure for Sonoma County to erosion and inundation caused by storms under a 2030 sea level rise scenario. The coastal exposure values reflect the relative exposure of different coastline segments to erosion and inundation caused by coastal storms. The map is based on spatial data that includes the 2030 projection for sea level rise, coastal geomorphology, coastal topography and bathymetry, surge potential, wind and wave exposure, natural habitats, and human population. This mapping approach is qualitative and provides a broad overview of the spatial patterns of coastal exposure along the Sonoma County coastline to help prioritize future nature-based adaptation planning strategies for specific locations.

The habitats fringing a coastline attenuate waves and thus reduce storm-related damage to shorelines from erosion and inundation. North of the Russian River mouth to the northern extent of Sonoma County, kelp forest habitat backed by rocky cliffs dominate the landscape and are generally low exposure. In contrast, south of the

Russian River mouth, a greater diversity of habitats (e.g., wetlands, beaches, dune systems) are present and are habitats that are highly exposed to erosion and inundation during storms compared to north of the River mouth. As coastal development and rising sea levels alter or damage these habitats, coastlines and nearby infrastructure become increasingly vulnerable to storms.

Coastal habitats provide an ecosystem service by reducing the impacts of storms and by increasing resilience in coastal areas. However, with ever increasing stresses on ecosystems, it is important to identify where natural habitats provide the greatest benefits to prioritize adaptation planning efforts that protect or restore those critical natural habitats. The habitat types which provide the highest level of natural protection have been identified and mapped.

Figures C-PS-5a-c depict the areas along the Sonoma County coastline in which natural habitat plays a role in reducing exposure to erosion and inundation during storms. For example, the dark brown areas in Doran Beach and south of Salmon Creek indicate locations where habitats play the largest role in reducing exposure. The lighter tones in the map also indicate where habitat areas provide a protective coastal ecosystem service.

5.1.4 Adaptation to Sea Level Rise

Much is at stake from sea level rise, and in order to minimize damage and losses, California's coastal communities must make adaptation to sea level rise a priority by conducting community sea level rise vulnerability and risk assessments and developing a Sea Level Rise Adaptation Plan. Developing a risk assessment involves considering the actual or future threats or hazards of concern, the economic importance or value of public facilities and infrastructure to the community, and the certainty of projected impacts to the degree that these are known or can be expected. Developing a Sea Level Rise Adaptation Plan involves setting goals, identifying objectives and adaptation measures, developing adaptation strategies for different types of land uses and facilities. The Adaptation Plan should consider public access, unique water dependent infrastructure, inundation caused by storm events, salt water intrusion, and consistency across any state and federal sea level rise projections.

In any coastal community there are three types of areas to be considered for adaptation planning: (1) undeveloped land that is considered or zoned to be developable; (2) existing unprotected development, including residential and commercial areas as well as infrastructure; and (3) existing development that has already been armored. The major armored area along the Sonoma County coast is a portion of the residential development above Gleason Beach. The Gleason Beach Highway 1 Realignment project

proposed by Caltrans is an example of a “retreat” adaptation strategy. The proposal is to realign a 3,700 foot, two-lane section of Highway 1 about 400 feet inland of the current alignment at Gleason Beach. The purpose of the project is to provide a safe transportation facility that is no longer vulnerable to advancing coastal erosion.

Adaptation strategies for private property may be different or more difficult from those appropriate for and public property. Over a longer timescale, the cost of restricting or limiting new development in areas vulnerable to the hazards or impacts from sea level rise is far lower than the cost of addressing damaged or threatened development. For existing private development in vulnerable areas, potential strategies for addressing the impacts from sea level rise include:

- (1) Develop incentives for planned retreat or relocation from vulnerable areas; establish mandatory rolling setbacks for future development or significant redevelopment in areas that are likely to be affected by the impacts from sea level rise within the anticipated lifetime of the structures.
- (2) Develop a plan and identify funding or other incentives for purchase or relocation of existing structures out of vulnerable areas.
- (3) Restrict rebuilding of structures in vulnerable areas that have been damaged by storms or the impacts from sea level rise.
- (4) Evaluate existing armored areas to determine whether additional armor or retreat is the most practical long-term approach.
- (5) Reduce and eliminate dependence on shoreline protection structures; there may be some critical structures where armoring may provide short-term protection until other long-term solutions can be implemented.

For existing public infrastructure or community resources including ports, and public trust uses such as navigation and recreation, strategies for addressing the impacts from sea level rise include:

- (1) Develop retreat or retrofit plans for existing infrastructure subject to future flooding, and remove and relocate or replace the infrastructure according to the plans.
- (2) Increase adaptive capacity of shoreline roads, and determine the feasibility of relocating shoreline roads and increasing culvert and roadside ditch capacity. Work with entities such as Caltrans that plan, construct, or operate infrastructure.
- (3) Modify the Local Coastal Plan Public Access Element and Public Access Plan to ensure long- term protection of the function and connectivity of existing public access and recreation resources.

- (4) Site and design all future projects and infrastructure to account for sea level rise projections based on the best available science and the projected life spans of the structures and facilities.
- (5) Reduce and eliminate dependence on shoreline protection structures; there may be some critical structures where armoring may provide short-term protection until other long-term solutions can be implemented.

Based on the costs and benefits as well as the risks, the adaptation plan should then identify the threshold at which the community should take action to prevent, reduce, or adapt to impacts from sea level rise. For example, a coastal park or parking lot can be used intermittently for a long time with periodic winter flooding, but a water or wastewater treatment plant at or near beach elevation must be retrofitted, relocated, or replaced well in advance of facility flooding or failure to ensure continued public services.

For new development in vulnerable areas, potential strategies for addressing the impacts from sea level rise include:

- (1) Consider revising Local Coastal Plan land use, siting, and design standards for new development to avoid and minimize risks.
- (2) Evaluate policies and standards for wetland, ESHA, and stream buffers to ensure protection of sensitive habitat into the future and to maximize the role natural habitats can play in reducing the impacts of sea level rise.
- (3) Consider revising bluff erosion rates and setback standards to avoid and minimize risks.

GOAL C-PS-4: Prevent unnecessary exposure of people and property to risks of injury or damage from sea level rise.

Objective C-PS-4.1: Regulate new development to reduce the risks of human injury or property damage in areas subject to projected future sea level rise and other coastal hazards to an acceptable level, incorporating adaptive capacity in design and operation when hazard risk exceeds a project-specific threshold.

Objective C-PS-4.2: Minimize the risks for existing development of human injury and property damage from projected future sea level rise and other coastal hazards to an acceptable level.

Objective C-PS-4.3: Assess what existing development and public facilities and infrastructure are vulnerable to projected future sea level rise and other coastal hazards.

Objective C-PS-4.4: Assess the risks to and potential impacts on existing development and public facilities and infrastructure from projected future sea level rise, inundation from seasonal storm events, and other coastal hazards.

Objective C-PS-4.5: Develop a plan for community adaptation to projected future sea level rise and other coastal hazards to reduce the risks and impacts to an acceptable level.

The following policies, in addition to others in this Public Safety Element and those in the Open Space and Resource Conservation, Water Resources, and Land Use Elements, shall be used to achieve these objectives:

Policy C-PS-4a: For the purposes of vulnerability and risk assessments, mapping, land use planning, and adaptation planning, consider the areas projected to be inundated by sea level rise by 2100 (including under projected high tides, high water conditions in combination with high tides, and with wave and wind impacts during storm events) to be potentially hazardous areas at risk of flooding using the best available scientific estimates, aligning with projections used by regional, state and federal agencies. **(New)**

Policy C-PS-4b: Use the best available science and technical analyses available in combination with site-specific information when evaluating land use or development proposals in areas subject to sea level rise and other coastal hazards. **(New)**

Policy C-PS-4c: Applications for Coastal Development Permits for development potentially subject to hazards from projected sea level rise, shall include a geologic/flood hazards report prepared by a licensed Geotechnical Engineer that evaluates the potential risk from inundation and/or coastal erosion over the economic life (100 years) of the development. The report shall evaluate a range projected sea level rise based on the latest state guidance and include recommendations on development location, design, and construction to reduce risk from coastal hazards and enhance adaptability of the development coast. **(New)**

Policy C-PS-4d: New development shall be set back a sufficient distance landward or otherwise sited and designed to avoid or minimize, to the maximum extent feasible, inundation and/or coastal erosion resulting from the extent of projected sea level rise, storm events, and other coastal hazards based on the best available science over the expected economic life of the development (100 years). **(New)**

Policy C-PS-4e: For development proposed where potential inundation, flooding, and/or coastal erosion resulting from projected sea level rise cannot be completely avoided, sea level rise adaptation measures shall be evaluated and incorporated into the development siting, design, construction, and operation. **(New)**

Policy C-PS-4f: New development shall be avoided on undeveloped land immediately adjacent to wetlands or other sensitive habitats that are at risk of inundation or flooding resulting from projected sea level rise so that these lands are available for wetland or other habitat restoration projects. **(New)**

Policy C-PS-4g: A buffer at least 100 feet wide from the upland edge of wetlands and riparian habitat shall be provided for new development. Buffers shall be measured from the extent of projected sea level rise in tidally influenced areas based on the best available science. In some cases, including for salt marsh wetlands, the required buffer should be greater than 100 feet. The California Department of Fish & Game, U.S. Fish & Wildlife Service, and U.S. Army Corps of Engineers shall be consulted to determine the buffer width. **(New)**

Policy C-PS-4h: As a condition of Coastal Development Permit approval for development subject to hazard risks in the Geologic Hazard Area Zone, Flood Hazard Area Zone, and areas subject to inundation from sea level rise, require the applicant to record a document approved by Permit Sonoma indemnifying the County from liability for any personal or property damage caused by natural geologic or other hazards on such properties and acknowledging that future shoreline protective devices to protect structures shall be avoided. Consider California Coastal Commission Draft Residential Adaptation Guidance, or successor document, in development of the condition. **(New)**

Policy C-PS-4i: The conditions of approval for any Coastal Development Permit on public or private property that is subject to hazards from projected sea level rise shall include the requirement that the owner shall record a deed with the following notice included: "The subject property is located in an area subject to inundation, flooding, or coastal erosion hazards as a result of projected sea level rise." **(New)**

6. WILDLAND FIRE HAZARDS POLICY

6.1 Background

The combination of highly flammable fuel, long dry summers and steep slopes creates a significant natural hazard of large wildland fires in many areas of Sonoma County. Wildland fire results in death, injury, economic losses, and a large public investment in firefighting efforts. Woodlands and other natural vegetation are destroyed resulting in the loss of timber, wildlife habitat, scenic quality and recreation. Soil erosion, sedimentation of fisheries and reservoirs, and downstream flooding can also result.

Most damage results from a few large fires in the dry weather months. There were 21 wildland fires of 100 acres or more in the County between 1989 and 2000.

Fire hazard severity has been mapped by the CAL FIRE. Areas on the County coast with a high or very high fire risk are shown on **Figures C-PS-6a-c** and include Timber Cove and Sea Ranch. The highest fire hazard in Sonoma County is found in mountainous areas with dry summers, plenty of fuel, and steep slopes.

Residences have increased the number of fires in rural areas. Ninety-seven percent of the wildland fires over 50 acres in Sonoma County since 1989 were caused by human activities or facilities. Residences in rural areas cause fire suppression agencies to devote limited resources to structural protection while the wildfire spreads.

The probability of large damaging fires in developed areas is affected by weather conditions and the spread of fires in surrounding wildland areas. The type of construction, preventive measures, and the extent of fire suppression services are the chief factors which determine how far these fires spread.

6.1.1 Hazards and Risk Assessment

Fire hazards shown on Figures C-PS-6a-c are only a general picture of the actual hazard because of the size of the areas and differences in vegetation and slope. The maps show the fire hazards only in unincorporated areas which are classified as wildlands and are therefore within the State Responsibility Area served by CAL FIRE.

6.1.2 Land Use Planning

In order to reduce the risks of property damage and human injury from wildland fires in rural areas, the types and intensities of land uses should be limited. Rural development should be most restricted where natural fire hazards are high, fire protection is limited, and road access prevents timely response by firefighting personnel and rapid evacuation by residents. Wildland fire hazards may be reduced by mitigation measures including removing vegetation and installing dependable water systems, but cannot be eliminated entirely.

6.1.3 The Sea Ranch Fuels Management

A landscape and fire management plan for The Sea Ranch was implemented in the 1990s to balance fire safety with the basic concept of preserving the natural landscape. In 2002 The Sea Ranch Association (TSRA) introduced a more aggressive Fuels Management Program to reduce fuel loads throughout The Sea Ranch. The Sea Ranch Association has continued to implement and expand the program. It incorporates the Sonoma County Fire Safe Standards (see Regulatory Environment below) and includes the following objectives and actions: create roadside fuel breaks to allow for safe evacuation and emergency access; reduce fuels on hillsides below homes to reduce fire

intensity; enlarge the Highway 1 fuel break and reduce fuels on both sides of the highway; introduce sheep and goat grazing in the meadows on both sides of Highway 1; enhance riparian vegetation and remove conifers in drainages; and control new vegetation growth. TSRA also addresses fire safety around individual structures through its Defensible Space Fuel Management Resolution which requires the owners of developed property to maintain the fuel breaks around structures mandated by CAL FIRE; and its Design Manual Rules, which outline the permit process, procedure, and standards for fuels management on private lots and neighboring property.

6.1.4 Fire Safety Standards

Fire hazard regulations are intended to minimize on-site property damage and personal injury, avoid damage to adjacent properties, and reduce the cost of fire suppression services. Increasing built-in fire protection in those areas where new construction is allowed is the most cost effective way of achieving these objectives. All development must have adequate water available for fire suppression, whether from a hydrant and community system or from an on-site storage tank.

Where development is permitted near wildlands and natural vegetation, the fire hazard must be further mitigated by other measures. The locations of subdivision lots and building envelopes can maximize access by emergency vehicles and minimize construction in steep or wooded areas. Fire retardant roof materials are now required in high fire hazard areas. Preventing the spread of wildland fires to and from structures also requires use of fire retardant materials and/or removal of surrounding vegetation and clearing of fuel breaks.

Differences in local, state, and federal fire safety standards and requirements and in staffing and training among local fire districts prompted the formation of the Sonoma County Department of Fire Services in 1985, now the Sonoma County Fire and Emergency Services Department. Improvements in standards for road design, water supply, and sprinkler systems have increased the effectiveness of local fire protection services. In February 2003 the County Board of Supervisors approved Ordinance Nos. 5402 and 5373 that amended the County Fire Code to require fire sprinklers for both residential and commercial development with some exceptions. In recent years, fire services have reorganized and consolidated in order to minimize administrative costs and to promote more efficient and consistent service response.

CalFire enforces requirements for firefighting and prevention, works with property owners on controlled burns, and advises rural residents on fire prevention methods. CalFire is currently preparing minimum fire safety standards for wildland areas. See

“Regulatory Setting” below for more information about CalFire responsibilities and activities.

Another important component of fire safety is an improved system of street addresses throughout the county. Fire response time, particularly in rural areas, is occasionally affected by the ability of the responder to locate the affected address. Improved visibility and standardizing street addresses can result in reduced emergency response time.

6.1.5 Public Education

Increased public awareness of fire hazards and fire safe practices is an effective way to avoid or reduce future fire damages and loss of life. Emergency service providers typically provide educational programs that focus on fire prevention. In addition to continuing to promote these ongoing programs, fire prevention information can be provided directly to the general public and to prospective permit applicants for incorporation into the building design. Such a program can be further expanded to include fire hazard information by providing fire hazard warning signs along roadways in particularly vulnerable fire hazard areas.

6.2 Regulatory Environment

The California Department of Forestry and Fire Protection (CAL FIRE) has lead responsibility for fighting wildland fires in designated State Responsibility Areas. The Sonoma County Fire and Emergency Services Department (County Fire) provides fire prevention, fire protection, rescue, emergency medical, code enforcement, and arson investigation services for the unincorporated areas of Sonoma County that are not included in an independent fire protection district. County Fire is responsible for enforcing the California Fire Code and other fire-related codes and ordinances. It enforces vegetation management, reviews building construction plans, and performs inspections of new construction for fire code compliance. In addition, three volunteer fire districts providing fire protection services to different portions of the Sonoma County Coastal Zone. See the Public Facilities and Services Element for a more detailed description of the fire protection services in the Coastal Zone.

The Sonoma County Fire Code is based on the National Fire Code, California Fire Code, Uniform Building Code, and California Subdivision and Development Code; constitutes the local adoption of the California Building Code; and is in Chapter 13 of the Sonoma County Code. It sets forth the requirements of the Sonoma County Fire Safety Ordinance, referred to as the Fire Safe Standards. The County Fire Code was adopted to establish minimum fire safe standards for development within the unincorporated area of the county. The County Fire Code requirements ensure that all new development within the

unincorporated area of the county will provide a basic level of fire protection around itself making it easier and safer for fire fighters to fight wildland and structure fires.

The Fire Safety Standards include but are not limited to requirements for emergency access, road naming and addressing, minimum emergency water supply and sprinklers to ensure a supply of water to fight or defend property from a fire, fuel modification and defensible space to reduce the possibility and intensity of a wildfire, and other fire protection measures. Due to the severe fire risk in many areas of the County, the County's Fire Safe Standards which outline development standards for emergency access, water supply, and vegetation management are more stringent than those required by the California Fire Code.

GOAL C-PS-5: Prevent unnecessary exposure of people and property to risks of injury or damage from wildland and structural fires.

Objective C-PS-5.1: Work with other fire agencies to improve fire safety standards, carry-out fire prevention and protection programs, and educate the public about fire hazards and fire prevention.

Objective C-PS-5.2: Regulate new development to reduce the risks of human injury and property damage from known fire hazards to an acceptable level.

The following policies, in addition to those in the Land Use and Public Facilities and Services Elements, shall be used to achieve these objectives:

Policy C-PS-5a: Encourage continued operation of California Department of Forestry and Fire Protection programs for fuel breaks, brush management, controlled burns revegetation, and fire roads; however, brush clearing and controlled burns shall not take place in designated Environmentally Sensitive Habitat Areas (ESHAs) or other sensitive habitats. **(Existing LCP Revised)**

Policy C-PS-5b: Controlled burns shall be allowed on agricultural land with a permit from the local fire agency and in consultation with the local Air Quality Management District and California Department of Forestry and Fire Protection. **(Existing LCP)**

Policy C-PS-5c: Automatic fire sprinkler systems or other on-site fire detection and suppression systems shall be required in all new residential and commercial structures, with exceptions for detached utility buildings, garages, and agricultural-exempt buildings. **(GP2020)**

Policy C-PS-5d: The severity of natural fire hazards, potential damage from wildland and structural fires, adequacy of fire protection services, and mitigation measures

consistent with the Public Safety Element shall be considered in the review of proposed development projects. **(GP2020)**

Policy C-PS-5e: Fire management plans shall be required for subdivisions and new or expanded recreational facilities in non-urban areas, including development of California Department of Parks and Recreation and Sonoma County Regional Parks holdings. Such plans shall include, but not be limited to, adequate water storage, adequate ingress and egress for emergency vehicles and occupant evacuation, and building siting to minimize fire hazards. **(Existing LCP Revised)**

Policy C-PS-5f: Encourage and promote fire safe practices and the distribution of fire safe educational materials to the general public, permit applicants, and local planning agencies. **(GP2020)**

Policy C-PS-5g: Provide fire hazard information signs in Areas of Very High or High Potential for Large Wildland Fires in a manner that is consistent with the Local Coastal Plan and does not degrade Scenic Highway Corridors or scenic views. **(GP2020)**

Policy C-PS-5h: Encourage private individuals and communities on the Sonoma coast to construct small-scale water storage facilities for back-up use in the case of fire and for back-up non-potable water demand. **(Existing LCP Revised)**

7. HAZARDOUS MATERIALS

7.1 Background

Many substances can be hazardous to human health and the environment, which includes air, soil, water, plants, and animals. The California Health & Safety Code defines a hazardous material as "any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and the environment if released into the workplace or the environment." Common hazardous materials include oils, fuels, paints and varnishes, antifreeze, cleaning products, solvents, pesticides (includes herbicides, insecticides, fungicides, and rodenticides), and the associated hazardous waste. The increased use of hazardous materials has increased the potential hazards from hazardous materials and actual human injury and environmental damage, especially when they are used and disposed of near surface water. Public concerns have led to tighter controls on the production, transport, storage, sale, and use of hazardous materials, particularly on the handling and disposal of concentrated residues and wastes produced by power plants and other industrial operations.

Hazardous materials are found at many locations in Sonoma County. The electrical generating plants in The Geysers geothermal area use and produce hazardous materials hauled on winding mountain roads. Spills and releases of such materials have occurred. Petroleum fuels get into groundwater and surface water, particularly from underground storage tanks at gasoline stations and marinas. Preventing hazardous materials in the County's solid waste landfills and transfer stations and industrial operations is important because these materials could affect water quality. Boat use, repair, and maintenance activities at Bodega Bay, Spud Point Marina, and Porto Bodega in the Coastal Zone involve the storage, handling, use, and disposal of hazardous materials such as oils and fuels, paints and varnishes, solvents, and cleaning agents that may drain to surface water.

Pesticides are another hazardous material commonly used in Sonoma County by agricultural operations as well as residential, commercial, and recreational land uses. While state law preempts local regulation of pesticides, the County does have the authority to establish use restrictions applicable to its own operations. By doing so, the County can set an example that will encourage others to reduce reliance on pesticides.

Concerns about Outer Continental Shelf (OCS) oil and gas development led to the approval of Ordinance 3592R in the late 1980s, a Countywide ballot initiative that requires voter approval of any proposed Local Coastal Plan Amendment to allow onshore facilities that would support OCS oil and gas development (see Outer Continental Shelf Development Policy in the Land Use Element). The issue of potential oil or other hazardous material spills from onshore support facilities would be addressed in the required environmental documents on the proposed projects.

The management of hazardous materials is included in this Public Safety Element because it has become a major public safety issue requiring attention significant personnel and financial resources and attention by local agencies. Different local, state, and federal agencies have different responsibilities in regulating hazardous materials, discussed under "Regulatory Setting" below.

7.2 Regulatory Setting

Public concerns over the possible adverse effects of hazardous materials on human health and the environment have led to tighter regulatory controls on the production, transport, storage, sale, handling, and use of hazardous materials.

7.2.1 Federal Hazardous Materials and Waste Programs

The primary federal laws regulating hazardous materials, administered by the United States Environmental Protection Agency (U.S. EPA), are the Resource Conservation and

Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). CERCLA, often referred to as the Superfund, was enacted to provide broad federal authority to clean up releases or threatened releases of hazardous substances at abandoned hazardous waste sites in the U.S. The hazardous materials waste program under RCRA establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal — in effect, from cradle to grave. In any given State, U.S. EPA or the State hazardous waste regulatory agency enforces hazardous waste laws. The U.S. EPA encourages States to assume primary responsibility for implementing a hazardous materials and waste program through State adoption, authorization, and implementation of the regulations.

7.2.2 State of California Hazardous Materials and Waste Programs

The State of California has assumed the primary responsibility for implementing the federal hazardous materials and waste program. California legislation in 1993 (Senate Bill 1082) established the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The Unified Program consolidates, coordinates, and makes consistent the California Environmental Protection Agency (Cal EPA) environmental programs which include:

- (1) Hazardous materials inventories and business plans
- (2) Permitting for generators of hazardous waste and operators of on-site hazardous waste treatment
- (3) Aboveground storage tanks
- (4) Underground storage tanks
- (5) Spill or accidental release prevention, control, and response
- (6) Fire code management plans

Under the Unified Program, Cal EPA certifies local agencies to implement the six state environmental programs listed above within their jurisdictions. The appointed local lead agencies are referred to as Certified Unified Program Agencies (CUPAs).

7.2.3 California Coastal Act

Section 30232 of the California Coastal Act requires that measures to protect against hazardous materials spills, and facilities and procedures for containment and cleanup of hazardous substances spills, be incorporated into proposed projects meeting the definition of development and which involve handling or transporting hazardous substances.

7.2.4 Sonoma County Hazardous Materials and Waste Lead Agencies and CUPAs

Hazardous Materials. The California Department of Toxics Substances Control (DTSC) is vested with the primary authority through the U.S. EPA to enforce federal and state laws pertaining to the regulation of hazardous materials and waste in California. The DTSC has authorized the Sonoma County Fire and Emergency Services Department as the lead agency and CUPA to enforce federal, state, and local laws pertaining to hazardous materials and hazardous waste management.

The Fire and Emergency Services Department enforces Chapter 29 of the Sonoma County Code regarding hazardous materials management, and for preparing a comprehensive hazardous materials and hazardous waste management plan. Chapter 29 regulates the storage, handling, and management of hazardous materials, whether in waste or non-waste form, unless specifically preempted by state or federal law. The Fire and Emergency Services Department is also responsible for emergency response to hazardous materials incidents throughout most of the County in coordination with local fire and police personnel, and enforces portions of the California Fire Code which address hazardous materials, including routine inspections.

Underground Storage Tanks. The State Water Resources Control Board (SWRCB) is vested with the primary authority through the U.S. EPA to enforce federal and state laws pertaining to leaking Underground Storage Tanks containing hazardous substances. The SWRCB has authorized the Sonoma County Department of Health Services as the lead agency and CUPA to enforce federal, state, and local laws pertaining to leaking underground storage tanks in the County.

Pesticides. The California Department of Pesticide Regulation (DPR) is vested with the primary authority through the U.S. EPA to enforce federal and state laws pertaining to the proper and safe use of pesticides in California. DPR's enforcement of pesticide use in the field is largely carried out in California's 58 counties by County Agricultural Commissioner Offices and their staffs. The DPR has authorized the Sonoma County Office of the Agricultural Commissioner as the lead agency and CUPA to enforce federal, state, and local laws pertaining to the use, storage, and sales of pesticides in the County.

Oil Spills. The Oil Pollution Act of 1990 (OPA) improved the nation's ability to prevent and respond to oil spills by establishing provisions that expand the federal government's ability, and provide the money and resources necessary, to respond to oil spills. Under the OPA, the U.S. Coast Guard and U.S. EPA are the lead responsible agencies for preventing, preparing for, and responding to oil spills that occur in and around coastal waters and inland waters of the United States, respectively.

The Office of Spill Prevention and Response (OSPR), within the California Department of Fish and Wildlife, serves the responsibilities as public trustee and custodian for the protection, management, and restoration of the fish, wildlife, and plants across the State. As such, it is one of only a few agencies in the United States that both maintains major pollution response authority and public trustee authority for wildlife and habitat. In 2014, Governor Jerry Brown expanded the capabilities of the OSPR to include all state surface waters at risk of oil spills from any source, which more effectively captured possible spills from pipelines, production facilities, and railroad oil shipments (California features more than 7,000 rail crossings over water bodies).

Transport of Hazardous Waste. The California Department of Toxic Substances Control (DTSC) is vested with the primary authority through the U.S. EPA to enforce federal and state laws pertaining to the transport of hazardous waste in California. The DTSC has authorized the California Highway Patrol and Office of the State Fire Marshal to enforce some of the federal, state, and local laws pertaining to the transport of hazardous waste.

To operate in California, hazardous waste transporters must be registered with the DTSC. Unless specifically exempted, hazardous waste transporters must comply with the regulations of the U.S. Department of Transportation, DTSC, California Highway Patrol, and Office of the State Fire Marshal.

GOAL C-PS-6: Prevent unnecessary exposure of people and property to risks of injury or property damage from hazardous materials.

Objective C-PS-6.1: Regulate the handling, storage, use, and disposal of hazardous materials in order to reduce the risks of injury or property damage from hazardous materials.

The following policies, in addition to others in this Public Safety Element and those in the Land Use and Public Facilities and Services and Water Resources Elements, shall be used to achieve these objectives:

Policy C-PS-6a: Siting of hazardous waste repositories, incinerators, facilities that use a substantial quantity of hazardous materials, or other similar facilities intended primarily for hazardous waste disposal shall be avoided in any area subject to inundation, flooding, coastal erosion hazards resulting from projected sea level rise and other coastal hazards, and in areas subject to heightened ground shaking during an earthquake event (Modified Mercalli Index (MMI) Ground shaking Intensity Level higher than Strong (VII) as identified on Figures C-PS-1a-c or within one quarter mile of schools. Siting shall be avoided in any area designated for urban residential or rural

residential use; on agricultural lands; or near waterways, bays, or the ocean.
(GP2020)

Policy C-PS-6b: A use permit shall be required for any commercial or industrial use involving hazardous materials in threshold planning quantities as determined by Federal and State laws. A hazardous materials management plan shall be required as a condition of approval for such permits. **(GP2020)**

8. IMPLEMENTATION PROGRAMS

8.1 Public Safety Implementation Programs

Program C-PS-1: Develop a comprehensive adaptation plan and incentives for planned retreat or relocation from hazard areas;

- (1) Establish mandatory rolling setbacks for future development or significant redevelopment in areas that are likely to be affected by the impacts from sea level rise within the anticipated lifetime of the structures.
- (2) Identify funding or other incentives for purchase or relocation of existing structures out of vulnerable areas or areas exposed to significant hazards risks.
- (3) Limit rebuilding of structures in vulnerable areas that have been damaged by storms or the impacts from sea level rise, including increased rates of erosion.
(New)

Program C-PS-2: Where geologic hazards threaten multiple properties in the same vicinity and all would benefit from a unified, coordinated response to minimize risks, consider the formation of a Geologic Hazard Abatement District (GHAD) as a means to reduce geotechnical problems associated with development in geologically active areas. A GHAD is an independent public entity (public agency) which oversees the prevention, mitigation, and abatement of geologic hazards. Funding of the GHAD is through supplemental property tax assessments. **(New)**

Program C-PS-3: Develop a Strategic Plan for and incorporate into existing plans, damage assessment and recovery of essential service buildings and facilities consistent with Policy PS-1n of the General Plan 2020. **(GP2020)**

Program C-PS-4: Consider amending or adopting a new hazard combining zone to address impacts related to development and redevelopment in hazard areas and on coastal bluffs in order to protect such development from the effects of costal bluff erosion. **(Existing LCP Revised)**

Program C-PS-5: Where additional data and information is necessary to adequately assess the on-site and off-site flood and inundation hazards from a proposed development, to develop mitigation measures, or to determine compliance of an existing or proposed development with the Coastal Zoning Ordinance, a supplemental site-specific flood and inundation hazards analysis shall be required. The site-specific analysis may include but is not limited to:

- (1) Topographic mapping.
- (2) Analysis of the influence of sea level rise on flood elevations and flood and inundation hazards and zones.
- (3) Delineation of flood and inundation hazard zones.
- (4) Calculation of expected flood elevations.
- (5) Calculation of expected flood velocity.
- (6) Analysis of the impacts on on-site and off-site flooding, drainage, and stormwater runoff.
- (7) Using construction details and specifications, analysis of compliance with the Coastal Zoning Ordinance.
- (8) Using cost and appraisal data, analysis of when reconstruction, rehabilitation, additions, or other improvements to structures would constitute a substantial improvement under the Sonoma County Code.
- (9) Development of mitigation measures to reduce or eliminate the potential for human injury and property loss from flood and inundation hazards, particularly in areas subject to repetitive property loss. **(New)**

Program C-PS-6: Establish a new Flood Hazard Area Combining Zone to include regulations for the permissible types of uses, intensities, and development standards in the following flood and inundation hazard areas:

- (1) 10-Year Base Flood Zones
- (2) 100-Year Base Flood Zones
- (3) Areas at Risk from Sea Level Rise by 2100 – Flooding
- (4) Areas at Risk from Sea Level Rise by 2100 – Landward Limit of Erosion High Hazard Zone
- (5) Areas at Risk from Tsunami of Up to 25 Feet

As a condition of coastal permit approval for development in the Flood Hazard Area Combining Zone, require the applicant to record a document exempting the County

from liability for any personal or property damage caused by natural geologic or other hazards on such properties and acknowledging that future shoreline protective devices to protect structures authorized by such coastal permit during the structure's economic life are prohibited. **(New)**

Program C-PS-7: Consider developing regulations that require the use of low impact development techniques to reduce stormwater runoff from new development. **(GP2020)**

Program C-PS-8: Consider preparing a study of the impacts of sea level rise and other coastal hazards on public facilities and infrastructure, private development, communities, and natural ecosystems based on the best available scientific estimates and current state guidance as part of future updates to the Hazard Mitigation Plan. **(New)**

Program C-PS-9: Study, monitor, develop, and implement a plan to mitigate the impacts to groundwater from saltwater intrusion resulting from sea level rise and storm events based on the best available science. **(New)**

Program C-PS-10: Consider preparation of a Sea Level Rise Vulnerability and Risk Assessment, and Adaption Plan for the Sonoma County coast based on guidance from the California Coastal Commission's Sea-Level Rise Policy Guidance (2018), the California Ocean Protection Council's Sea-Level Rise Guidance (2018), and other applicable publications. Focus on those SubAreas of the Sonoma County coast at the highest risk of inundation, flooding, or coastal erosion resulting from sea level rise, which include The Highcliffs/Muniz/Jenner (SubArea 6), Pacific View/Willow Creek (SubArea 8), Duncans Mills (SubArea 7), and State Beach/Bodega Bay (SubArea 9).

Preparation of the Sea Level Rise and Coastal Hazards Adaptation Plan shall involve collaboration with pertinent County of Sonoma departments and agencies, independent utility districts, and responsible federal and state agencies; and participation of the public.

The Sea Level Rise and Coastal Hazards Adaptation Plan shall focus on public and quasi-public facilities and infrastructure and include the following components:

- (1) Discussion of the following planning tools to help communities adapt to sea level rise and other coastal hazards: public purchase of private property for public uses, sale or transfer of public land to accommodate relocated roads and infrastructure, transfer of development rights, parcel reconfiguration, and zoning and land use designation amendments.
- (2) Requirements and standards for siting, design, and construction of new public facilities and infrastructure and private structures in areas subject to sea level rise and other coastal hazards as mapped in the Vulnerability Assessment.

- (3) Requirements and standards for maintenance and removal of abandoned structures.
- (4) Cost/benefit analyses of: a) adaptation measures versus no adaptation measures and b) carrying-out adaptation measures pre-inundation versus post-inundation (i.e., emergency conditions).
- (5) Plan for full disclosure of potential hazards to owners of property in areas subject to sea level rise and other coastal hazards as mapped in the Vulnerability Assessment.
- (6) Identify options and mechanisms to minimize or avoid County obligations to compensate for private property loss or damage resulting from sea level rise and other coastal hazards.

The County will continue to work with the Ocean Protection Council and other agencies and organizations to develop possible adaptation strategies for particular areas of the Sonoma County coast. **(New)**

Program C-PS-11: Identify existing green infrastructure (coastal land, habitats, vegetation, natural features, and ecological processes) which may be used to increase coastal resiliency to climate change, sea-level rise, and flood and geologic hazards (erosion); and strategies for adapting to climate change and sea-level rise through maintenance or enhancement of this green infrastructure. These adaptation strategies may include, but are not limited to, planned retreat, land preservation, habitat conservation, and habitat restoration. **(New)**

Program C-PS-12: Periodically review and update the extent of projected sea level rise in the Local Coastal Plan based on best available science. **(NEW)**

Program C-PS-13: Consider adopting an ordinance which prioritizes relocation and allows reconstruction of a structure damaged or lost from inundation or flooding related to sea level rise where certain criteria can be met; an evaluation of the feasibility of relocation to a location where hazard risks are minimized is provided; where relocation is not feasible, a reconstructed structure must be raised a minimum number of feet above the anticipated base flood elevation considering projected future sea level rise during the economic life of the structure based on the most up-to-date science; and where such an adaptation approach is considered feasible and practical and is expected to minimize the risk of inundation and flooding of the structure to an acceptable level. **(New)**

Program C-PS-14: Continue to adopt revisions to the California Fire and Building Codes and other standards which address fire safety as they are approved by inspection organizations and the State of California. Review, revise, and/or adopt existing or new

local Codes, ordinances, and Fire Safe Standards to reflect contemporary fire safe practices. **(GP2020)**

Program C-PS-15: Proposed development projects shall be referred to the Sonoma County Fire and Emergency Services Department and responsible fire protection agencies for their review and comment. **(GP2020)**

Program C-PS-16: Improve and standardize the County's street addressing system in order to reduce emergency service response times. **(GP2020)**

8.2 Other Initiatives

Other Initiative C-PS-1: Coordinate flood hazard analysis and floodplain management activities with the United States Army Corps of Engineers (USACOE), FEMA, State Office of Emergency Services (State OES), Sonoma County Fire and Emergency Services Department, Sonoma County Water Agency (SCWA), and other responsible agencies. **(GP2020)**

Other Initiative C-PS-2: Encourage FEMA to update its flood insurance studies and Flood Insurance Rate Maps (Flood Rate Maps) to show the following information. This mapping would allow regulations and mitigation efforts to focus on the areas at the highest risk of flood hazards, and allow flood insurance premiums to be more reflective of the actual flood hazard risks on specific properties. Provide FEMA data generated from detailed parcel-specific and site-specific analyses of flood elevations and flood hazard zones when available to assist in updating flood insurance studies and Flood Insurance Rate Maps.

- (1) Flood elevations and flood hazard zones which reflect inundation hazards unique to the Coastal Zone such as sea level rise and greater ocean surges and larger waves during storms based on the most up-to-date data and science, including data developed under the California Coastal Analysis and Mapping Project and Open Pacific Coast Study (OPC Study); and
- (2) Detailed mapping of the 100-year floodplain to delineate the 10-year, 25-year, and 50-year floodplains. **(New)**

Other Initiative C-PS-3: Coordinate with state and local emergency services to educate the public about the areas subject to inundation from a tsunami, where to go in the event of an earthquake, and evacuation routes in the event of a tsunami by distributing educational materials to parcel owners within the tsunami run-up zone and by erecting signage specified by the Sonoma County Operational Area Tsunami Response Plan. **(New)**

Other Initiative C-PS-4: Encourage the California Department of Parks and Recreation, Sonoma County Regional Parks Department, Sonoma County Agricultural Preservation and Open Space District, Sonoma Land Trust, and similar organizations to purchase natural lands adjacent to wetlands or other sensitive natural habitats which are at risk of inundation or flooding from projected sea level rise, based on the best available science, for use as wildlife habitat. **(New)**

Other Initiative C-PS-5: Work with stakeholders to develop a disclosure for real estate transactions involving properties subject to inundation, flooding, and/or coastal erosion hazards as a result of projected future sea level rise. Prior to the lease, sale, or other conveyance of any portion of public property, or issuance of a Coastal Development Permit for the use or development of public lands subject to projected sea level rise, provide a Real Estate Disclosure Statement which states that the property is located in an area that is subject to inundation, flooding, or coastal erosion hazards as a result of projected sea level rise. **(New)**

Other Initiative C-PS-6: Work with the California Department of Forestry and Fire Protection to identify areas of high fire fuel loads and take advantage of opportunities to reduce those fuel loads, particularly in Areas with Very High or High Potential for Large Wildland Fires and in High Fire Hazard Severity Zones. **(GP2020)**

Other Initiative C-PS-7: The Sonoma County Department of Emergency Services shall offer assistance to local agencies in adopting and enforcing fire safety regulations and shall work with local agencies to develop proposed improvements to related County Codes and standards. **(GP2020)**

Other Initiative C-PS-8: Encourage the California Department of Parks and Recreation, and the Sonoma County Regional Parks Department to continue efforts to educate the public about fire hazards and fire prevention. **(Existing LCP Revised)**

Other Initiatives C-PS-9: Continue to educate the general public about and promote the reduction in use of hazardous materials, proper disposal of hazardous materials, and the use of safe alternatives to hazardous materials in County operations and private businesses. **(GP2020 Revised)**

Other Initiatives C-PS-10: Work with applicable regulatory agencies to regulate the use, disposal, and transport of hazardous materials consistent with adopted County policies. **(GP2020 Revised)**

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PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

CIRCULATION AND TRANSIT ELEMENT September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

CIRCULATION AND TRANSIT ELEMENT

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CIRCULATION AND TRANSIT ELEMENT

1. INTRODUCTION

1.1 Purpose and Background

The Circulation and Transit Element addresses the planned transportation routes and facilities along the coast, including goals, objectives, and policies affecting the mobility of future residents, businesses, and visitors. The 1976 California Coastal Act (Coastal Act) encourages maintenance and improvement of access to coastal resources, and requires that State Highway 1 in rural areas remain a scenic two-lane highway.

The current traffic congestion on the coast has resulted from a combination of factors. Regional factors include growth in employment and population primarily within Sonoma County's cities. Local factors include increases in parkland acreage through expansions, acquisitions, and dedications; in the number and length of trails and associated hiking opportunities; in access to the beach and ocean; and lack of public transportation. Most importantly, the public continues to prefer the automobile as the primary means of transportation.

1.2 Relationship to Other Elements

The Circulation and Transit Element and its implementing measures are coordinated with the Land Use Element in the following manner to assure that the transportation system serves future travel demand and helps attain the desired land use plan.

The Circulation and Transit Element uses the Land Use Element projections of future population and job growth.

The policies are designed to support the land use plan, maps, objectives and policies that emphasize concentrating development within Urban Service Areas and limited growth in rural areas.

Other Elements also address transportation issues. Pedestrian oriented urban design, bikeways, and air quality are also addressed in the Open Space and Resource Conservation and Public Access and Recreation Elements. Projected noise contours for highway sources are addressed in the Noise Element.

1.3 Scope and Organization

The Circulation and Transit Element contains five sections. These sections include: an introduction and four sections containing goals, objectives, and policies for the planned

circulation and transit system, alternative transportation modes and vehicle use reduction, highway system, and phasing and funding of improvements. Programs needed to implement proposed policies are also identified. In addition, the Element calls out ongoing or potential future County initiatives, referred to as “Other Initiatives”, intended to support maintenance and improvement of the transportation system, and promote inter-agency and community collaboration.

2. CIRCULATION AND TRANSIT SYSTEM

2.1 Existing and Projected Transportation Conditions in 2020

As part of the GP2020 update of the Sonoma County General Plan, the County conducted a circulation and transit analysis of the entire County. This analysis formed the basis for a countywide strategy to provide mobility and access as well as to protect the character of small communities. The Sonoma County coast was included in this analysis, but due to the projection of limited population growth in the area it was not emphasized.

The Sonoma Coast/Gualala Basin region has a sparse roadway network due to its remote location and very low population density. The major roadways, all two-lane rural roads, are State Highway 1, State Highway 116, Bodega Highway, Stewarts Point-Skaggs Springs Road, Coleman Valley Road, Annapolis Road, and Valley Ford-Freestone Road. With the exception of State Highway 1, these roadways run east-west (**Figures C-CT-1a-c**). Other roads serve only as minor access routes, but could be important as alternate routes in emergencies. Daily buses connect the small communities along State Highway 1 to Sebastopol, Santa Rosa, and Mendocino County.

Traffic patterns are affected primarily by recreational travel, particularly on weekends. Tourism has increased as a result of growth in the Bay Area; growth in employment and population primarily within the County’s cities; increases in parkland acreage through expansions, acquisitions, and dedications; increases in number and length of trails and associated hiking opportunities; increases in access to the beach and ocean; and the lack of convenient public transportation along the coast.

2.1.1 State Highway 1

Traffic and Circulation Conditions

Traffic on State Highway 1 has increased since the first transportation study was conducted for the 1981 Local Coastal Plan. Tourism has increased substantially in recent years and has had an impact on traffic levels on State Highway 1 during peak weekend periods, especially in the summer and fall. State Highway 1 through Bodega

Bay and Bodega Avenue are the most congested on weekends. Peak traffic volumes on the stretch of State Highway 1 adjacent to the Sonoma Coast State Beaches occur on summer weekends, particularly on Sundays, during which visitors and local residents often experience severe traffic congestion and shortage of parking spaces.

Table C-CT-1: Traffic Volume Trends Highway 1 2007-2017

Intersection	Peak Hour	Peak Month Daily Average	Annual Average Daily Traffic
Valley Ford Road	150.0%	34.7%	31.0%
Valley Ford/Freestone Road	96.1%	31.8%	28.9%
Bodega Highway	77.8%	136.8%	116.7%
Bodega Eastshore Road	16.9%	-1.8%	-9.6%
JCT. RTE. 116 East	29.0%	7.7%	11.1%
Jenner	51.5%	7.7%	11.1%
Fort Ross, Fort Ross Road	73.9%	6.7%	8.1%
Stewarts Point/Skaggs Springs Road	42.9%	-2.3%	0.0%

The large increase in peak hour volumes at the southernmost intersections shows a growing trend for commuters living in the Sebastopol area to use Highway 1 as an alternative route to job centers in Petaluma and Marin County. The peak month daily average at the Bodega Highway intersection indicates a significant increase in tourism traffic through this intersection. Given the smaller increase at the northern intersections, most traffic is headed to Bodega Bay and nearby public beach areas.

Sonoma Coast State Park and Sonoma County public beaches are among the most visited parks northwestern California, generating significant weekend traffic congestion. With limited public transportation and lack of safe bicycle routes, most people are obligated to drive in order to enjoy the Sonoma Coast.

Roadway Capacity and Conditions

Existing natural conditions along coastal roadways, and lack of undeveloped land adjacent to the right-of-way in the communities of Bodega Bay and Jenner create a situation where capacity improvements are generally not feasible and should be discouraged except where capacity improvement will also improve road safety. Outside of these communities, Highway 1 operates well below capacity, and congestion is not an issue. With narrow shoulders, inadequate sight lines, and limited opportunity for safe passing, improving road safety is the primary concern along the entire length of Highway 1.

Transportation Improvements

In the 1985 California Department of Transportation (Caltrans) Route Concept Report Summary on State Highway 1, Caltrans identifies the following potential roadway safety improvement projects: shoulder widening, passing lanes, channelization and intersection improvements to enhance turning movements, additional parking areas where unsafe parking conditions currently exist, and features that would minimize roadside parking on the highway. Safety improvements to State Highway 1 constructed since the last Local Coastal Plan Update in 1995 include left turn lanes at The Sea Ranch, at the intersection with State Highway 116 near Jenner, near The Tides restaurant, and at the Bodega Harbour Subdivision. Other improvements include stabilization projects north of Jenner, guardrails along the Russian River estuary, and the ongoing project to relocate Highway 1 along Gleason Beach.

Providing turning lanes at intersections and parking areas is the most effective approach to improving the capacity of State Highway 1 while maintaining it as a two-lane scenic highway. Addition of turning lanes provides considerable safety benefits as well as reducing traffic delays in Jenner, Bodega Bay, and near public beaches.

Other safety improvements proposed for State Highway 1 are selective widening and road alignments; parking management, development and enforcement programs; and other types of road improvements such as roadway striping and marking, bicycle lanes and pedestrian ways. Improvements to State Highway 1 such as construction of bicycle paths or widening of shoulders will be necessary to construct the Sonoma County segment of the California Coastal Trail (see discussion below).

Minor road improvements in the community of Bodega Bay will not relieve traffic congestion, and establishing a bypass route has proven infeasible. While capacity along this section of State Highway 1 will remain inadequate, there are opportunities to improve pedestrian safety and reduce dependency on automobiles for local trips by adding pedestrian walkways, restricting turning movements across traffic, and reducing vehicle speeds.

2.1.2 Active Transportation and Transit

The Complete Streets Act of 2008, which mandates that all cities and counties modify the circulation element of their general plans to provide for a transportation network that equitably meets the mobility needs of all, including pedestrians, bicyclists, children, students, persons with disabilities, users of public transportation, together with motorists and movers of commercial goods.

A comprehensive, safe, and convenient bicycle and pedestrian transportation network is a critical component of an overall strategy to reduce automobile dependency for residents and visitors, as well helping to meet greenhouse gas (GHG) emissions reduction standards established under the California Global Warming Solutions Act of 2006 (AB 32).

Walking and bicycling are the most energy efficient modes of transportation. When all energy inputs are considered, walking or bicycling to work will consume less than 1% of the energy used by the most fuel efficient automobile. Given that transportation accounts for almost half of carbon emissions generated in Sonoma County, even small mode shifts away from automobiles to walking and bicycling will create significant reductions in the County's carbon footprint.

Safety of bicyclists and pedestrians along is a major transportation issue on the Sonoma County coast. Although the highway is narrow, winding, and dangerous for bicyclists, it is increasingly popular as a bicycle touring route. Class I bicycle paths along State Highway 1 would alleviate these issues.

Where Class I or separate bicycle paths are not feasible, Class II bicycle paths are safer than the existing narrow shoulder along the highway. However, under that option parking restrictions and enforcement would be needed to keep parked vehicles out of roadside bicycle lanes.

Public transit is provided by Mendocino Transit Authority and Sonoma County Transit. Mendocino Transit Authority operates bus route 95, which is the only year-round transit service along the Sonoma Coast. Service is limited to a single daily trip running southbound to Santa Rosa in the morning and returning in the afternoon. This route provides a limited opportunity for coastal residents working in Sebastopol and Santa Rosa, but does not provide good service for workers living in the coastal area that need to commute to jobs in the inland areas of Sonoma County.

Sonoma County Transit routes 29A and 29B provide seasonal service on weekends to the Sonoma Coast from June through early September. These routes provide several trips per day, with Route 29A connecting Bodega Bay to Sebastopol and Santa Rosa. Route 29B connects Bodega Bay to Jenner, Duncan's Mills, Monte Rio, and Guerneville.

2.1.3 California Coastal Trail

The 1975 California Coastal Plan mandated the California Coastal Conservancy (Coastal Conservancy) to develop and implement the California Coastal Trail, a continuous public trail or system of trails along the length of the coastline, with the exact alignment and

location to be determined locally through community input. The Sonoma County segment of the California Coastal Trail will provide opportunities for a variety of users. (Also see Public Access Element).

Assembly Bill 1396, passed in August 2008, enhances coordination for development of the California Coastal Trail. The bill requires Caltrans to notify certain agencies involved in development of the California Coastal Trail of any excess State property that could be used as part of the trail, requires transportation planning agencies whose jurisdiction includes a part of the California Coastal Trail to coordinate with certain agencies in its development.

3. CIRCULATION AND TRANSIT SYSTEM POLICY

3.1 General Transportation Policies

GOAL C-CT-1: **Provide a well-integrated and sustainable circulation and transit network that supports community-centered growth and equitably meets the mobility needs of all. (GP2020 Revised)**

Objective C-CT-1.1: Pay for development of the circulation and transit system through a combination of funding sources, including Federal and State programs, local bonds and taxes, development fees, and fair share formulae for cooperative funding of improvements.

Objective C-CT-1.2: Where alternate modes of travel are available, reduce the need for future automobile use by a combination of improvements and incentives that favor alternate modes over automobile use.

Objective C-CT-1.3: Reduce greenhouse gas emissions by minimizing future increase in vehicle miles travelled (VMT).

Objective C-CT-1.4: Require that circulation and transit system improvements be done in a manner that, to the extent practical, is consistent with community and rural character, minimizes disturbance of the natural environment, minimizes air and noise pollution, and helps reduce greenhouse gas emission.

Objective C-CT-1.5: Reduce travel demand by striving to provide jobs/housing balance of approximately 1.5 jobs per household, and encourage creation of jobs and housing in urbanized areas and transit centers.

Objective C-CT-1.6: Improve demand for transit by developing a growth management strategy encouraging projects in urbanized areas

that decrease distance between jobs and housing, increase the stock of affordable housing, and increase density.

The following policies shall be used to achieve these objectives:

Policy C-CT-1a: Where practical, locate and design improvements and new circulation and transit facilities to minimize disruption of neighborhoods and communities, disturbance of biotic resource and environmentally sensitive habitat areas (ESHAs), destruction of trees, and noise impacts. **(GP2020)**

Policy C-CT-1b: Require new development to reduce vehicle miles traveled to the maximum extent feasible. **(GP2020 Revised)**

3.2 Public Transit and Motor Vehicle Trip Reduction (GP2020)

GOAL C-CT-2: **Increase the opportunities, where appropriate, for transit systems, pedestrians, bicycling, and other alternative modes to reduce the demand for automobile travel.**

Objective C-CT-2.1: Increase ridership on public transit systems.

Objective C-CT-2.2: Increase the share of home based work or commute trips taken by public transit.

Objective C-CT-2.3: Coordinate bus transit services.

Objective C-CT-2.5: Design, implement, and maintain a transit system that serves seniors, persons with disabilities, youth and persons with limited incomes so that they may participate in a full range of activities.

Objective C-CT-2.7: Use Traffic Demand Management measures to reduce peak period congestion.

Objective C-CT-2.8: Accommodate bicycling and walking as a viable modes of transportation as an alternative to motor vehicle use through implementation of the Sonoma County Bicycle and Pedestrian Plan. **(GP2020 Revised)**

Objective C-CT-2.9: Develop bicycle and pedestrian facilities in order to promote bicycling and walking as transportation modes to connect neighborhoods and community services.

Objective C-CT-2.10: Use shoulders, paths, and bike lanes for other alternative transportation modes along existing streets, roads, and bicycle routes where consistent with public safety and the Vehicle Code.

The following policies shall be used to achieve these objectives:

Public Transportation Access and Facilities

Policy C-CT-2a: Provide efficient, affordable public transportation service in and to the Coastal Zone and require expansion of alternative modes of transportation where opportunities are identified. **(New)**

Policy C-CT-2b: Provide convenient, accessible transit facilities for youth, seniors, and persons with disabilities, and paratransit services as required by ADA. Promote efficiency and cost effectiveness in paratransit service such as use of joint maintenance facilities. **(New)**

Policy C-CT-2c: On transit routes, design the physical layout and geometrics of arterial and collector highways to be compatible with bus operations. **(GP2020)**

Policy C-CT-2d: Wherever feasible, require development projects to implement measures that increase the average occupancy of vehicles, such as: **(GP2020 Revised)**

- (1) Vanpools or carpools, ridesharing programs for employees, preferential parking, parking subsidies for rideshare vehicles, and transportation coordinator positions, and
- (2) Preferential parking space and fees for rideshare vehicles, flexibility in parking requirements. **(GP2020)**

Policy C-CT-2e: Encourage measures that divert automobile commute trips to transit whenever possible, including:

- (1) Establishment of standards for site design to allow for transit access, bus turnouts and passenger shelters, pedestrian access ways between transit stops and buildings, secure bicycle lockers and shower facilities, complementary street layouts and geometrics that accommodate buses and bicycles, and transportation kiosks for tenants of business;
- (2) Programs that promote transit use to existing job centers and schools, such as transit information centers, on-site sale of transit tickets and passes, shuttles to transit stations or stops, transit ticket subsidies for employees and students, private or subscription transit service, parking fees and transportation allowances. **(GP2020)**

Policy C-CT-2f: Require major employment centers and employers to provide facilities and Traffic Demand Management (TDM) programs that support alternative transportation modes, such as bike and shower facilities, telecommuting, flexible schedules, etc. These programs may apply to existing employers as well as to new

development. Establish measurable goals for these programs, and use a transportation coordinator that will provide information, select TDM measures, and monitor and report on program effectiveness. If voluntary TDM measures do not effectively reduce peak congestion, impose mandatory TDM measures by ordinance. **(GP2020)**

Bicycle and Pedestrian Facilities

Bicycle transportation facilities (bikeways) are classified as Class I, II, or III, as defined below.

Class I Bikeways are also known as multi-use paths. Class I bikeways provide bicycle travel on an all-weather surface within a right-of-way that is for exclusive use by pedestrians, bicyclists and other non-motorized modes. Class I bikeway surface must be compliant with provisions of the Americans with Disabilities Act (ADA). These bikeways are intended to provide superior safety, connectivity, and recreational opportunities as compared to facilities that share right-of-way with motor vehicles.

Class II Bikeways are on-street bike lanes and provide a striped and stenciled lane for one-way travel on either side of a street or highway. Unlike Class III bikeways (below), Class II bikeways have specific width, geometric, and maintenance standards.

Class III Bikeways are facilities shared with motor vehicles that provide connection to Class I and II bikeways through signage, and design, creating advantages for bicyclists not available on other streets. By law, bicycles are allowed on all roadways in California except on freeways when a suitable alternate route exists. Class III bikeways have signs reminding motorists of the California Vehicle Code requirements for safe passing and to be aware of cyclists using the road.

GOAL C-CT-3: **Establish a safe and convenient bicycle and pedestrian transportation network, well integrated with transit, to reduce greenhouse gas emissions, increase outdoor recreational opportunities, reduce dependency on motor vehicles, and improve public health. (GP2020)**

Objective CT-3.1: Design, construct and maintain a comprehensive Bikeways Network that links communities, coastal access points, and other major activity centers including, but not limited to, schools, public facilities, commercial centers, recreational areas and employment centers. **(GP2020)**

Objective CT-3.3: Encourage pedestrian, bicycle, and transit oriented development. **(GP2020)**

Objective CT-3.4: Increase use of non-motorized modes for commute trips by providing safe, convenient routes and adequate end of trip

facilities at workplaces, with an emphasis on facilities that have potential to close gaps in the network and/or reduce shorter trips. **(GP2020)**

Objective CT-3.5: Provide incentives for business and public facilities to increase the use of walking and bicycling by employees for both commuting and daily operations. **(GP2020)**

Objective CT-3.6: Reduce bicycle and pedestrian accidents per mile traveled by at least 2% per year. **(GP2020)**

Objective CT-3.7: Provide a diverse range of recreational opportunities through a well-designed network of bikeways, multi-use trails, sidewalks, and related support facilities. **(GP2020)**

Objective CT-3.8: Eliminate potential obstacles to walking and cycling by providing continuous and well-connected pedestrian walkways and bicycle facilities, and safe road crossings, with a focus on short trips within developed coastal communities. **(GP2020 Revised)**

Objective CT-3.9: Develop alternative mode trip and accident databases, to improve safety, allow regional coordination of improvements, and travel model development to improve the level of quantitative evaluation. **(GP2020)**

The following policies shall be used to achieve these objectives:

Policy CT-3a: Use the adopted Sonoma County Bicycle and Pedestrian Plan as the detailed planning document for existing and proposed bikeways and pedestrian facilities. **(GP2020)**

Policy CT-3b: Use the policies of the Bicycle and Pedestrian Plan whenever reviewing development projects to insure that projects are consistent with the Bicycle and Pedestrian Plan and incorporate necessary bicycle and pedestrian improvements identified in the Bicycle and Pedestrian Plan as a condition of project approval. **(GP2020)**

Policy CT-3c: BPAC shall be responsible for advising the Coastal Commission, Board of Supervisors, Planning Commission, Board of Zoning Adjustments, Project Review Advisory Committee, and County staff on the ongoing planning and coordination of the County's bicycle and pedestrian transportation network. **(GP2020)**

Policy CT-3d: The Regional Parks Department shall be responsible for establishing and maintaining Class I bikeways, and the Department of Transportation and Public Works (TPW) shall be responsible for establishing and maintaining Class II and III bikeways and pedestrian facilities along County rights-of-way in unincorporated areas. **(GP2020)**

Policy CT-3e: Regional Parks and TPW shall be responsible for periodically collecting bicycle and pedestrian counts at locations shown in the Bicycle and Pedestrian Plan consistent with Metropolitan Transportation Commission standards. The BPAC, in consultation with Regional Parks and TPW, shall review this data to determine effectiveness in applying such data for County improvement projects and update the count locations as needed. **(GP2020)**

Policy CT-3f: Revise County Traffic Guidelines to require that traffic studies identify impacts to existing and planned bicycle and pedestrian facilities. Consider development of bicycle and pedestrian facilities as mitigation measures for congestion and greenhouse gas emission impacts. **(GP2020)**

Policy CT-3g: Develop a Level of Service standard for identifying safety and connectivity of the bicycle and pedestrian transportation network that takes into consideration travel distance, potential bicycle and pedestrian transportation needs, potential for improved mode split with improved facilities, and existing network deficiencies. **(GP2020 Revised)**

Policy CT-3h: Use the Level of Service standard developed by **Policy CT-3g** to evaluate impacts to bicycle and pedestrian facilities that may result from discretionary projects, and identify corrections and/or improvements necessary to mitigate those impacts. **(GP2020)**

Policy CT-3i: Use the following standards for selection of new routes: **(GP2020 Revised)**

- (1) Route shall be located along the most direct line of travel that is convenient and safe for cyclists and pedestrians. Less direct routes may be used near schools and recreational facilities if necessary to provide increased safety.
- (2) Routes and bikeway design shall be ADA compliant.
- (3) Avoid routes that cross driveways serving large retail and commercial uses. Where no alternative route can be identified, consider reconfiguration of on-street parking in these areas to improve safety.
- (4) Pavement surface quality - Bikeways shall be free of surface defects that compromise bicycle safety. Utility covers and drains shall align with the bikeway surface and be located outside of the bikeway when feasible. Drainage grates shall be aligned perpendicular to the direction of travel in order to avoid catching bicycle wheels.
- (5) Where bus stops are located along bikeways, design bus turnouts and the bike lane to conflicts between passengers, buses, and bicycles.

- (6) Identification of a reliable source of funds to support maintenance and operation shall be considered before identifying a new Class I Bikeway alignment.
- (7) Bikeway design and route selection shall maximize public benefit and safety per dollar invested.

Policy CT-3j: The most recent version of Chapter 1000 of the Caltrans Highway Design Manual, AASHTO's "Guide for the Development of Bicycle Facilities", and the "California Manual on Uniform Traffic Control Devices" (MUTCD) shall be used as general design guidelines for design, construction and maintenance of bikeways. **(GP2020)**

Policy CT-3k: In addition to the general standards found in **Policy CT-3j** above, use standards found in the most recently adopted Bicycle and Pedestrian Plan for selection, design, construction, and maintenance of Class I, II and III bikeways. **(GP2020)**

Policy CT-3l: Where an existing or proposed bicycle is located on a bridge or over a culvert, bicycle and pedestrian facilities shall be included as part of replacement or major maintenance. "Major reconstruction" is defined as any activity requiring a Coastal Development Permit and/or Streambed Alteration Agreement. Improvements are required regardless of priority of the remainder of the bicycle route served by the bridge or culvert. **(GP2020 Revised)**

Policy CT-3m: Where several bikeways of different classes follow a similar route or provide similar connectivity, the BPAC shall be consulted when construction of one facility appears to reduce the need or function of other facilities. **(GP2020)**

Policy CT-3n: Use the following criteria to determine consistency of public and private projects with the Bicycle and Pedestrian Plan: **(GP2020 Revised)**

- (1) Development of lands traversed or adjoined by an existing or future Class I bikeway shall not preclude establishment of the bikeway, nor conflict with use and operation of the bikeway or adversely affect long term maintenance and safety of the facility.
- (2) Construction, widening, or maintenance of roads with designated bikeways shall be consistent with design and maintenance standards for the appropriate class of bikeway as specified by the Bicycle and Pedestrian Plan.

Policy CT-3o: Design, construct, and improve bikeways consistent with the Bicycle and Pedestrian Plan Project Priority List. This list shall establish the priority, class, and location of Sonoma County bikeways projects. **(GP2020)**

Policy CT-3p: The following projects shall be referred to the BPAC for a determination of consistency with the Bicycle and Pedestrian Plan and to evaluate potential for creating hazards or barriers to walking or bicycling: **(GP2020)**

- (1) Road widening projects.
- (2) Road capacity improvement projects.
- (3) Resurfacing, restoration, and/or rehabilitation of roads with existing or proposed Class II or Class III bikeways.
- (4) Resurfacing, restoration, and/or rehabilitation of roads that include the installation of rumble strips, AC berms or similar barriers, and/or roadway dots in the shoulder area.
- (5) Traffic calming improvements.
- (6) Discretionary projects adjacent to existing or proposed Class I bikeways and/or roads with existing or proposed Class II or Class III bikeways.
- (7) Discretionary projects anticipated to be conditioned with roadway improvements along existing or proposed Class I, II or III bikeways.

Policy CT-3q: Require that bikeway improvements be included as part of all road maintenance or improvement projects along road segments with existing or proposed bikeways to the maximum extent feasible. **(GP2020)**

Policy CT-3r: Where nexus exists, require private or public development to plan, design, and construct bicycle and pedestrian facilities to integrate with the existing and planned bicycle and pedestrian network. **(GP2020)**

Policy CT-3s: Where discretionary projects are found to create additional demand for bicycle travel, require the project to directly provide or participate in the funding of bikeway improvements such as gap closures, shoulder widening, safety improvements and signage that will improve bicycle access to destinations located within 3 miles of the project site. **(GP2020)**

Policy CT-3t: Require mitigation either through in-lieu fees, or development of alternative facilities that have been recommended by the BPAC, when development projects or road improvements are anticipated to result in a loss of existing bicycle and pedestrian facilities or jeopardize development of future facilities identified in the Bicycle and Pedestrian. **(GP2020)**

Policy CT-3u: Develop a maintenance reporting system for bikeways with a central point of contact that can be used to report, track, and respond to routine bicycle and pedestrian maintenance issues in a timely manner. **(GP2020)**

Policy CT-3v: Require road construction projects to minimize their impacts on bicyclists and pedestrians through the proper placement of construction signs and equipment and by providing adequate, safe, well-marked detours. Where it is safe to do so, allow bicyclists and pedestrians to pass through construction areas in order to avoid

detours. Where two-way bicycle and pedestrian travel can be safely accommodated in a one-way traffic control zone, adequate signage shall be placed to alert motorists of bicycles and pedestrians in the lane. **(GP2020)**

Policy CT-3w: Encourage cooperation between Caltrans, Regional Parks, TPW, SCTA, and the Coastal Commission to close gaps in the bikeway network and ensure the system is constructed, and maintained. **(GP2020 Revised)**

Policy CT-3x: Require dedication or purchase of right of way for Class I bikeways when a nexus can be established between the proposed development and the need for bikeways in the affected area. **(GP2020)**

Policy CT-3y: Provide adequate bicycle parking as part of all new school, public transit stops, public facilities, and commercial, industrial, and retail development following standards established in adopted Bicycle and Pedestrian Plan. **(GP2020)**

Policy CT-3z: Encourage local and regional transit agencies to accommodate bicycles on buses. **(GP2020)**

Policy CT-3aa: The BPAC shall review bicycle parking at transit facilities and accommodations to carry bicycle on-board buses every 2 years to assure that anticipated demand for parking and on-board accommodations can be met. **(GP2020 Revised)**

Policy CT-3bb: Collect bicycle and pedestrian accident data in the coastal zone on an annual basis. The BPAC shall review this data and identify high risk areas, prioritizing improvements, or additional needs for future accident data collection. **(GP2020)**

Policy CT-3cc: Give highest priority to safety related improvements of pedestrian facilities in the vicinity of schools, public transit facilities, and crossings in communities. **(GP2020)**

Policy CT-3dd: Require pedestrian-oriented street design in local communities. **(GP2020)**

Policy CT-3ee: Require centrally located shared parking in local communities whenever feasible for commercial uses rather than requiring individual businesses to provide separate parking areas. **(GP2020)**

Policy CT-3ff: Where discretionary projects are found to create additional demand for pedestrian travel, require the project to directly provide or participate in the funding of pedestrian improvements such as sidewalks, gap closures, steps, safety improvements, and/or trails that will improve pedestrian access to destinations located within 2 miles of the project site. **(GP2020)**

Policy CT-3gg: Provide high-visibility crosswalk marking at all pedestrian crossings. Wherever possible, install pedestrian signalization, refuge islands and signage warning vehicles to stop for pedestrians and watch for cyclists. **(GP2020)**

Policy CT-3hh: Inventory safety needs/hazards along routes to and around schools in order to identify improvements necessary to improve safety and create a priority list of projects necessary to correct these hazards. **(GP2020)**

Policy CT-3ii: Encourage school districts to participate in providing safe bicycle and pedestrian connections that serve students from surrounding neighborhoods when constructing or improving schools. Encourage school districts to provide secure bicycle parking areas for students, faculty, and staff. Require private schools to provide continuous pedestrian pathways and bicycle facilities from adjacent residential communities to the school grounds. **(GP2020)**

Policy CT-3jj: Coordinate Bicycle Safety Education Programs at schools, with law enforcement agencies, school districts, advocacy groups, local bicycle shops, and other interested organizations. The program shall include traffic rules, bicycle handling skills, the importance of good helmets, lights and reflectors, bicycling clothing, and bicycle maintenance courses in cooperation with local bicycle shops and organizations. **(GP2020)**

Policy CT-3kk: Distribute bicycle and pedestrian safety, educational, and promotional materials to students, parents, faculty, and staff at school orientations. Consider other opportunities for public education such as drivers training and citation diversion programs. **(GP2020)**

Policy CT-3ll: Support constructive efforts from advocacy groups to address bicycle and pedestrian transportation issues. **(GP2020)**

Policy CT-3mm: Provide the option of flexible work schedules to County employees in order to accommodate commuting by bicycle, walking, or transit. **(GP2020)**

Policy CT-3nn: Develop a Guaranteed Ride Program for County workers and employees of other employers with participating programs who regularly bicycle, walk, vanpool, carpool, or use transit for their trip to work. The program would encourage use of alternative transportation modes by providing free transportation in the event of personal emergencies, illness, or unscheduled overtime. **(GP2020)**

Policy CT-3oo: Consider establishing greenhouse gas impact fees for new development. Use a portion of this fee to fund planning, design, and construction of bikeways and pedestrian facilities. **(GP2020)**

Policy CT-3pp: Work with Federal, State, regional, and local agencies and any other available public or private funding sources to secure funding for bikeways and pedestrian facilities. **(GP2020)**

Policy CT-3qq: Encourage coordination with Caltrans to fund design, construction and maintenance of bikeways and pedestrian facilities. **(GP2020)**

Policy CT-3rr: Develop a long range strategy to provide long term funding necessary to maintain and operate the Class I bikeway network. **(GP2020)**

3.3 Road Capacity

GOAL C-CT-4: **Provide and maintain a highway system capacity that serves projected travel demand and creates a transportation network that equitably meets the mobility needs of all, including pedestrians, bicyclists, children, students, persons with disabilities, users of public transportation, together with motorists and movers of commercial goods. (GP2020 Revised)**

Objective C-CT-4.1: Maintain an LOS C or better on roadway segments unless a lower LOS has been adopted.

Objective C-CT-4.3: Allow the above LOS to be exceeded if it is determined to be acceptable due to environmental or community values, or if the project(s) has an overriding public benefit that outweighs the lower Levels of Service and increased congestion.

Objective C-CT-4.4: Develop a Heritage Road Program for coastal roadways. This program will create special design guidelines to protect the unique character of these roads while maintaining safety. (GP2020 Revised)

The following policies shall be used to achieve these objectives:

Establishing and Evaluating Roadway Capacities

Policy C-CT-4a: Use the LOS established in **Objectives 3.1 and 3.3** to determine whether or not roadway segment congestion would exceed the desired LOS on the road system. In cases where a roadway segment is designated as LOS F, a particular matter (PM) peak volume to capacity ratio of 1.2 is the acceptable LOS. **(GP2020)**

Policy C-CT-4b: Use area and/or project traffic analyses to determine if intersections meet the LOS standards of **Objectives C-CT-3.2 and C-CT-3.3**. Based on this analysis, identify and implement intersection improvements needed to achieve LOS D. **(GP2020)**

Transportation Design Guidelines

Policy C-CT-4c: Use the American Association of State Highway Transportation Officials (AASHTO) functional classification system and guidelines for geometric design for the highway network. **(GP2020 Objective became policy)**

Policy C-CT-4d: Road design and maintenance activities shall be consistent with the principals of the Complete Streets Act of 2008 and consider the mobility needs of all road users on an equitable and equal basis. **(New)**

Policy C-CT-4e: Designate and design Rural Principal and Minor Arterial Roads as highway routes that carry large volumes of intercity traffic and that place priority on the flow of traffic rather than on access to property. The following policies apply to Urban and Rural Arterials:

- (1) Work with Caltrans to modify Caltrans design standards (i.e. Design Exceptions) for State Highways 1 and 116 to address community compatibility and protection of Coastal resources when conflicts arise.
- (2) Design Principal and Minor Arterial Roads to discourage access from abutting parcels and to prohibit such access if reasonable access is available elsewhere, to encourage driveway consolidations, to avoid parking during peak travel periods, and to provide turn deceleration and acceleration lanes at intersections where warranted.
- (3) Set and enforce access standards for new driveways and other encroachments to the Arterial Road system. These standards may include functional layout, location, and spacing requirements to minimize side frictions.
- (4) In agricultural areas, include measures such as road signs, wider shoulders, and turnouts or over/under passes to provide safer roads for the agricultural industry, residents, and visitors where compatible with the character of the area and not impeding public access. **(GP2020)**

Policy C-CT-4f: Designate and design Rural Major and Minor Collector Roads as routes that are intended to carry the internal traffic of a local area from the local road system to Arterial Roads and provide access to property. Collector Roads that are designated for traffic calming improvements are primarily intended to serve the local community. The following policies apply to Rural Collectors:

- (1) Allow access from abutting parcels and on-street parking.
- (2) Design traffic calming improvements to accommodate local circulation, to accommodate emergency vehicles, to reduce speeds, to promote the safety of pedestrian and bicycle traffic, and to discourage truck traffic and through traffic, particularly during peak periods.

- (3) In agricultural areas, include measures such as road signs, wider shoulders, and turnouts or over/under passes to provide safer roads for the agricultural industry, residents, and visitors where compatible with the character of the area. **(GP2020)**

Policy C-CT-4g: Designate and design Local Roads as routes that are intended to provide access to property and to carry local traffic to Collector Roads. Local Roads that are designated for traffic calming improvements are primarily intended to serve the local community. The following policies apply to Local Roads:

- (1) Design local roads for reasonable access by emergency and service vehicles.
- (2) Design traffic calming improvements to accommodate local circulation, to accommodate emergency vehicles where possible, to reduce speeds, to promote the safety of pedestrian and bicycle traffic, and to discourage truck traffic and through traffic, particularly during peak periods.
- (3) When practical, locate horizontal and vertical road alignments to correspond to natural topography.
- (4) In agricultural areas, include measures such as road signs, wider shoulders, and turnouts or over/under passes to provide safer roads for the agricultural industry, residents, and visitors where compatible with the character of the area and with protecting visual resources and public access. **(GP2020)**

Roadway Safety Improvements

Policy C-CT-4h: When a nexus is identified between a project and the need for safety improvements, require the safety improvements as a condition of approval. **(GP2020 Revised)**

Policy C-CT-4i: In general, safety improvements to Arterial Roads should be given a higher priority for funding than capacity improvements to Collector and Local Roads that may serve as alternate routes to those Arterial Roads. **(GP2020)**

Policy C-CT-4j: Consider intersection management improvements at key intersections throughout the coast as needed to address intersection congestion and long delays for turning movements. These may include installation of traffic signals, signal timing, re-striping, lengthening, turn lane additions, or other improvements, provided the improvements are consistent with the applicable road classifications and protection of coastal resources. **(GP2020/Existing LCP)**

Policy C-CT-4k: Construct improvements such as realignment, signalization, roundabouts, turn restrictions, one-way streets, and traffic calming at the following intersections to improve safety at the following intersections: **(GP2020/Existing LCP revised)**

- (1) Bay Flat Road/Bodega and Cypress Dunes Campgrounds (Sonoma Coast State Beach)
- (2) Bay Flat Road/Eastshore Road
- (3) State Highway 1/Eastside Road
- (4) State Highway 1/Taylor Street
- (5) State Highway 1/ Bay Hill Road **(Existing LCP Revised)**

Policy C-CT-4l: Relocate Highway 1 along Gleason Beach (Postmile 15.0 - 15.8) inland sufficient distance to avoid hazards created by bluff retreat and sea level rise. **(New)**

Policy C-CT-4m: Construct the following sets of road improvements to increase the capacity and safety of State Highway 1 in Jenner:

- (1) *State Highway 1* – from western property line of assessor’s parcel number (APN) 099-150-013 (10990 State Highway 1) to 200 feet from intersection with Burke Avenue; and Burke Avenue - 200 feet: road realignment and widening, curbing, turn lane for parking and Burke Avenue, one-way parking circulation, and parking restrictions.
- (2) *State Highway 1* – about eastern bank of Jenner Creek to about opposite northern property line of APN 099-113-012 (10469 Riverside Drive); Riverside Drive - about 65 feet; and 65 Willig Drive - about 80 feet: road widening, turn lanes, and parking restrictions. **(Existing LCP Revised)**
- (3) *Intersection of Highway 1 and 116* – Roundabout, minor realignment to provide more sight distance and/or signalization to improve safety. Consider minor realignment consistent with protection of Coastal resources. **(New)**

Policy C-CT-4n: Provide turn lanes at The Sea Ranch intersections listed below. An intersection improvement of lower priority could be constructed before an intersection improvement of higher priority if funding is available.

(1) ***Priority I***

The Stables and North Recreation Center entrance (already widened)
Annapolis Road
Longmeadow Road
Moonraker and Whalebone Reach

(2) ***Priority II***

Lodge Entrance

(3) ***Priority III***

Leeward Spur
Deerfield Road
Breaker Reach
Vantage Road
Pine Meadow
Whitebluff Road
Headlands Reach
Navigators Reach
Lodge Entrance and Halcyon **(Existing LCP Revised)**

Policy C-CT-4o: Repair and maintain Bay Hill Road to provide a safe access to homes and farmlands east of Bodega Bay. **(Existing LCP)**

Policy C-CT-4p: Encourage safety improvements on State Highway 116-River Road, Bodega Highway and Petaluma-Valley Ford Road to improve safety on east-west roads that connect State Highway 1. **(Existing LCP)**

Policy C-CT-4q: Implement the following capacity and safety improvements along State Route 1:

- (1) Where visibility and prevailing traffic speeds create potential hazards, consider measures to enhance safety and maintain public access. Remove parking areas or small turnouts where safety is increased by removal, except where these parking areas and turnouts are associated with an existing or future coastal access point. (Existing LCP Revised)
- (2) Restrict turning movements at parking areas where necessary to promote safe entry and exit.
- (3) Construct turning lanes and entry improvements at parking areas listed in The Public Access Plan. **(Existing LCP Revised)**

Policy C-CT-4r: Consider traffic calming improvements in the unincorporated communities of Bodega, Bodega Bay, Jenner, and Timber Cove. **(GP2020 Revised)**

Policy C-CT-4s: While providing for capacity and safety improvements, ensure that State Route 1 shall remain a scenic two-lane highway within rural areas. **(New)**

3.4 Phasing and Funding of Improvements Policy

GOAL C-CT-5: **Integrate the funding and development of planned circulation and transit system improvements with countywide transportation planning efforts and land use planning and development approval. (GP2020)**

Objective C-CT-5.1: Equitably allocate the costs of circulation and transit system improvements among the responsible public and private entities responsible for creating the need for system improvements.

Objective C-CT-5.2: Work with the SCTA and Federal and State governments to obtain the necessary funding for the planned circulation and transit system.

Objective C-CT-5.3: Maintain acceptable Levels of Service as set forth in this Element by implementing funding strategies for planned improvements.

The following policies shall be used to achieve these objectives:

Policy C-CT-5a: Review and condition development projects to assure that the LOS and/or public safety objectives established in **Policies C-CT-4a** and **C-CT-4b** are being met. If the proposed project would result in an LOS worse than these objectives, consider denial of the project unless one or more of the following circumstances exists:

- (1) The improvements needed to meet the LOS and/or public safety objectives will be completed prior to occupancy of the use;
- (2) Funding is identified and committed to completion of the needed improvements; or
- (3) A fee or fair share contribution has been established for the needed improvement that will fully fund the project's fair share of the future improvements. **(GP2020)**

Policy C-CT-5b: Require that new development provide project area improvements necessary to accommodate vehicle and transit movement in the vicinity of the project, including capacity improvements, traffic calming, right-of-way acquisition, access to the applicable roadway, safety improvements, and other mitigation measures necessary to accommodate the development without inhibiting public access. **(GP2020 Revised)**

Policy C-CT-5c: Carry out on an as needed basis projects that enhance traffic safety but do not significantly increase capacity, including but not limited to traffic control devices (signals and signs), curvature reduction, turn lanes at intersections, shoulder improvements, reconstruction, and resurfacing. **(GP2020)**

Policy C-CT-5d: Continue to implement traffic mitigation fees. **(GP2020)**

4. IMPLEMENTATION PROGRAMS

4.1 Circulation and Transportation Implementation Programs

Program C-CT-1: Monitor the effectiveness of the planned circulation and transit system on an ongoing basis. Cooperate with the Sonoma County Transportation Authority (SCTA) to establish and maintain an ongoing Countywide traffic modeling program that:

- (1) Maintains a coordinated land use database on an annual basis for cumulative impact analysis of the circulation and transit system;
- (2) Assesses the level of service (LOS) and how well planned improvements are keeping pace with Countywide growth and development;
- (3) Establishes the nexus for allocating fair share funding of regional and subregional improvements;
- (4) Identifies the impacts of projects and appropriate mitigation measures on the circulation and transit system;
- (5) Assists in the planning of detailed operation improvements in individual communities, and
- (6) Is capable of modeling weekend and off-peak travel demand in order to plan for tourism and special event traffic.

Consider the use of moratoria or other growth management measures in areas where the monitoring program shows that the LOS objectives are not being met due to lack of improvements. **(GP2020)**

Program C-CT-2: Monitor traffic volumes on County-maintained road segments, and work with Caltrans on similar State Highway 1 segments that are projected to experience unacceptable Levels of Service during peak weekend periods, particularly in the summer and fall months. Assemble these data for use in future assessment of development project impacts on weekend traffic patterns. **(GP2020)**

Program C-CT-3: Work with transit providers to improve bus service between Bodega Bay and Jenner with regular connections to inland communities and job centers. Coordinate routes, schedules, and fares among transit providers to make transfers convenient between the various transit systems, especially during commute periods. **(GP2020 Revised)**

Program C-CT-4: Encourage measures to modify the timing of peak commute and school trips to reduce congestion, including reduced work weeks and flexible, variable,

or staggered work hours. Consider adoption of standards requiring TDM programs and telecommuting for new businesses and employment centers. **(GP2020)**

Program C-CT-5: Classify and designate roadways according to the functional classifications of the AASHTO manual. **(GP2020)**

Program C-CT-6: Establish Heritage Road Program to preserve public roads with unique scenic, historic, recreational, cultural, archeological and/or natural qualities that may be compromised if the road is fully improved to meet current road standards. As part of this program, adopt special design standards to balance necessary improvements, safety, and maintenance with the unique character of these roads. **(GP2020 Revised)**

Program C-CT-7: Based upon an established nexus, assign responsibility for funding transportation improvements to new development in the affected area by assessing development fees or fair share contributions. **(GP2020 Revised)**

4.2 Other Initiatives

Other Initiative C-CT-1: Coordinate with Caltrans, California State Department of Parks and Recreation, the California Coastal Commission, and other appropriate entities in developing and implementing guidelines for expediting the review and approval of State Route 1 repair and maintenance activities consistent with the policies of the Local Coastal Plan. **(New)**

Other Initiative C-CT-2: Encourage ongoing development of the Safe Routes to School program by coordinating efforts of advocacy groups, school districts, and County departments. **(GP 2020)**

Other Initiative C-CT-3: Encourage and participate in joint efforts by the various transit operators to coordinate services by reducing route duplication, coordinating schedules to increase transfer potential, encouraging joint transit fare prepayment, joint marketing of transit services, and discounting fares for intersystem transfers. **(GP2020)**

Other Initiative C-CT-4: Encourage Sonoma County Transit to coordinate and cooperate with Mendocino Transit Authority and Marin Transit in improving and expanding bus service for Sonoma County coast visitors and residents. **(New)**

Other Initiative C-CT-5: Work with transit agencies to maximize funding from Federal and State governments to address existing deficiencies, improve safety, and support ongoing maintenance of the circulation and transit system. **(GP2020)**

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PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

PUBLIC FACILITIES AND SERVICES ELEMENT September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

PUBLIC FACILITIES AND SERVICES ELEMENT

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PUBLIC FACILITIES AND SERVICES ELEMENT

1. INTRODUCTION

1.1 Purpose

The Public Facilities and Services Element addresses nine types of public services mainly related to the physical development of the Sonoma County coast. These services include: water, wastewater disposal, public education, fire protection, law enforcement, medical, solid waste management, public utilities, and youth and family services.

The purpose of this Element is to lay the groundwork for future decisions related to these public services and infrastructure, to establish future policy regarding providing facilities for these services, and to integrate public service concerns into land use decision making. This Element is designed to increase the likelihood that public services will be available when needed to serve the residents and businesses of the Sonoma County coast.

The Public Works policy of the 1976 California Coastal Act allows, consistent with the General Plan, development of public works capacity to accommodate needs identified by the Local Coastal Plan. Where the capacity of basic public works is limited, development of land uses encouraged by the Coastal Act, such as coastal dependent industry, receive priority over other uses.

1.2 Relationship to Other Elements

Highway and public transportation needs are identified and addressed in the Circulation and Transit Element. Water supply and water quality issues are addressed in the Water Resources Element. Needed park and recreation facilities are identified and addressed in the Public Access Element.

1.3 Scope and Organization

The Public Facilities and Services Element describes the current status of public services in terms of service capacity and demand in relation to projected growth. It is divided into sections providing policy direction for each type of public facility or service. Programs needed to implement proposed policies are also identified. In addition, the Element calls out ongoing or potential future County initiatives, referred to as "Other Initiatives," that support the provision and maintenance of adequate public facilities and services within the Coastal Zone.

2. GENERAL POLICY FOR PUBLIC FACILITIES AND SERVICES

Goal C-PF-1: Ensure that water supply and wastewater treatment and disposal, park and recreation, public education, fire protection and emergency medical, law enforcement, medical, and solid waste management services and public utility sites are available to meet the future needs of Coastal Zone residents and visitors.

Objective C-PF-1.1: Limit water supply and wastewater treatment and disposal, parks and recreation, public education, fire protection and emergency medical, law enforcement, solid waste management, and public utilities facilities and services to those needed for projected demand from existing development.

Objective C-PF-1.2: Help County Service Areas and Special Districts to provide needed public facilities and services.

The following policies, in addition to those in the Water Resources and Open Space and Resource Conservation Elements, shall be used to achieve these objectives:

Policy C-PF-1a: Water supply and wastewater treatment and disposal, parks and recreation, public education, fire protection and emergency medical, law enforcement, solid waste management, and public utilities facilities and services shall be planned, designed, and constructed in accordance with projected demand from existing development as identified by Local Coastal Program (LCP) land use policies. **(GP2020)**

Policy C-PF-1b: New Special Districts shall only be established within defined Urban Service Areas and Rural Community Boundaries as designated in the Local Coastal Plan. Special districts shall only be formed or expanded where assessment for, and provision of, service would not induce new development inconsistent with policies of the LCP. **(Existing LCP Revised)**

3. WATER AND WASTEWATER TREATMENT AND DISPOSAL SERVICES POLICY

On the Sonoma County coast, development is concentrated in Urban Service Areas and Rural Communities. The Coastal Act mandates that new development be located in close proximity to developed areas with public facilities and services. To delineate the areas appropriate for development in the Coastal Zone, Urban Service Areas have been established on the Local Coastal Plan Land Use Map and include The Sea Ranch and Bodega Bay. Rural Community Boundaries, areas that were previously subdivided or

developed with public water and private Onsite Waste Water Treatment Systems (OWTSSs), have also been established on the Land Use Map and include Duncans Mills, Jenner, Sereno del Mar/Carmet, Salmon Creek, Timber Cove, and Valley Ford.

On the coast expansion of public sewer beyond the boundaries of Urban Service Areas and expansion of public water or public sewer beyond the boundaries of Rural Communities are prohibited except under specific conditions. Development infill is expected where water and OWTSSs or sewer regulations can be met. Part of the development infill strategy is to encourage consolidation of adjacent lots in high hazard areas or visually and environmentally sensitive areas in accordance with Coastal Act policies to protect views and coastal resources and minimize public safety hazards.

The California Coastal Act mandates that new development be located in close proximity to developed areas with public services and facilities. In order to delineate the areas appropriate for development, an Urban Service Area Boundary has been established on the Bodega Bay and Sea Ranch Land Use Plan Maps. Expansion of public sewer beyond this area is prohibited except as allowed by policies in the Public Facilities and Services Element. The Local Coastal Plan also establishes Rural Community Boundaries in areas that were previously subdivided or developed with public water and private OWTSSs. Extension of public water beyond or public sewer into these areas is prohibited except under specific conditions.

3.1 Water Services

An adequate and healthful water supply is essential if the Sonoma County coast is to sustain its residential population and its economic stability. As noted above, the Water Resources Element establishes goals, objectives, and policies addressing a broad range of water-related issues, including water quality and supply pertaining to private wells and public water systems. This section is intended to address issues regarding improving water systems for moderate expansion of planned communities, developing new water systems, and extending water services to new areas not currently served.

The Sonoma Coast is a water scarce area, and developing reliable water sources for urban development is very difficult. Several wells or springs may be needed to produce even modest water yields. Most of the water systems on the coast are small and substandard in some respect. The main problems are insufficient water and limited financial capability. Water sources are generally wells or creeks which may run low in summer months when demand is highest. Most coastal wells produce only a limited amount of water at any time due to the geology of the area. The owners of small water systems cannot afford extensive search for and development of additional water supplies.

No additional sources of water supply appear feasible for the communities of Jenner, Rancho del Paradiso, Bridgehaven, West Beach, and Valley Ford. The Salmon Creek subdivision has marginally adequate water supplies for existing development. If adequate water supplies are not available, some lots in the existing subdivisions may be unbuildable. Water system development and improvement continues at The Sea Ranch, Timber Cove, Sereno del Mar, Carmet, and Bodega Bay. Water supplies sufficient for subdivision buildout or moderate additional expansion appears limited to these five areas and Duncans Mills.

Maintaining the quality of water in small water systems, especially surface springs and storage tanks, is problematic because it requires periodic monitoring and testing. Several older small water systems are poorly designed or maintained resulting in inadequate water pressure. The firefighting capability of most of the systems is inadequate because of limited water supplies or low water pressure.

The Sonoma County coast has about 16 water systems that fall under the regulatory authority of the State Water Resources Control Board (Water Resources Board) as a “public water system”. A public water system is a system for providing piped water to the public for human consumption that has 15 or more service connections or regularly services at least 25 individuals daily at least 60 days out of the year. The Water Resources Board regulates three main types of public water systems, defined below.

- (1) **Community:** a public water system that has 15 or more service connections or regularly services at least 25 resident individuals at least 60 days of the year. This category includes subdivisions, mutual water companies, and mobile home parks.
- (2) **Non-Community Transient:** a public water system that serves at least 25 non-resident individuals daily at least 60 days of the year, but no more than 24 year-round residents. This category includes restaurants, campgrounds, small wineries, and motels.
- (3) **Non-Community Non-Transient:** a public water system that serves as least 25 of the same persons over 6 months of the year. This category includes schools and larger places of employment with more than 25 employees.

The public water systems on the County coast range in size from The Sea Ranch Water Company, a Community system with 1,684 connections; to the Blue Heron Restaurant, a Non-Community Transient system with one connection. **Table C-PF-1** provides general information about the public and private water systems on the coast. On occasion, operator inattention or lack of funding leads to public water system failure and a request for County takeover of the water system. County management of the water system can improve reliability, but funding may still be lacking. In relying on small water systems to support development, careful consideration should be given to long-term management issues.

Table C-PF-1: Characteristics of Public Water Systems

Water System	Type	Uses Served	# Connections/ Lots Served	# Vacant Lots or Lots Not Served	Source of Water Supply	Adequacy of Water Supply
Bodega Bay Public Utilities District	Community	Residential Commercial Industrial	1,058	194	Salmon Creek (2 wells) Roppolo wellfield - 3 wells Sand Dunes wellfield - 2 wells	Adequate
Fort Ross School District	Non-Transient Non-Community	School	9	N/A	Groundwater well onsite	Adequate
Sonoma County County Service Area (CSA) 34 - Jenner	Community	Residential Restaurant Hotel/Motel Public (297 parcels total)	136	174	Jenner Creek	Adequate
Sonoma County CSA 41 - Salmon Creek	Community	Residential Public (130 parcels total)	99	36	Groundwater well on Maryana Drive; Spring - general subsurface flow of water from hills east of Salmon Creek; water collection and treatment system improvement project constructed in 2014	Adequate since water collection and treatment system improvement project constructed in 2014
Timber Cove County Water District	Community	Residential	176	129	Timber Cove Creek, water stored in reservoir at 22108 Timber Cove Road constructed in 1997	Reservoir volume adequate to supply 4 months water supply at build-out
Blue Heron Restaurant	Transient Non-Community	Restaurant	1	N/A	Sweetwater Springs Mutual Water Company	Adequate
Bridgehaven Trailer Park	Community	Recreation	31	N/A	Spring about 150 yards uphill from water treatment building at trailer park Stream about 100 yards from south end of bridge at Jenner (from Red Hill)	Adequate

Table C-PF-1: Characteristics of Public Water Systems (continued)

Water System	Type	Uses Served	# Connections/ Lots Served	# Vacant Lots or Lots Not Served	Source of Water Supply	Adequacy of Water Supply
Casini Ranch Campground Water System	Transient Non- Community	Recreation	14	N/A	2 wells 1 spring	More than adequate
Duncans Mills Camping Company Duncans Mills Trading Company	Transient Non-Community Transient Non-Community	Recreation Restaurant Retail	125	N/A	Well 1,400 feet from Russian River	Adequate
Fort Ross Lodge & Store	Transient Non-Community	Restaurant Hotel/Motel	2	N/A	Well below lowest unit of lodge	More than adequate
Rancho Del Paradiso - California Water Service Company	Community	Residential	58	8	Intertie pipeline to Sweetwater Springs Water District facility in Monte Rio constructed in 2006	Adequate since 2006 intertie constructed
Russian River Utility <i>Sereno Del Mar Water Company - Sereno del Mar</i>	Community	Residential	168	9	9 wells - two gallery inlets from underflow of Scotty Creek, seven wells 70 feet deep; One spring about half mile east	Adequate
Russian River Utility <i>Carmet-by-the-Sea Mutual Water System - Carmet</i>	Community	Residential	64	0	2 horizontal wells on hillside east of subdivision	Adequate
Russian River Utility <i>Sereno Del Mar Water Company - Gleason Beach</i>	Community	Residential	20	5	50 meter wells and Carmet- by-the-Sea springs	Adequate

Table C-PF-1: Characteristics of Public Water Systems (continued)

Water System	Type	Uses Served	# Connections/ Lots Served	# Vacant Lots or Lots Not Served	Source of Water Supply	Adequacy of Water Supply
The Sea Ranch Water Company	Community	Residential Commercial	1,857	605	Gualala River	Adequate
Timber Cove Inn	Non-Transient Non-Community	Hotel/Motel	3	N/A	Timber Cove County Water District	Adequate
Valley Ford Water Association	Community	Residential Commercial	19	0	3 wells south of community along north side of Estero Americano	Poor water quality – see above under “Public Water Systems”
Stillwater Cove Regional Park	Transient Non- Community	Recreation (campground w/22 sites, Ranger residence, office)	2	0	Canyon well – winter & spring (next to Regional Parks office driveway) Creek well – summer & fall (next to Stockholm Creek)	Adequate

3.1.1 Public Water Systems

All public water systems on the Sonoma County coast have adequate water supply and quality for all existing and planned development (per consultation with water system operators), with the exception of the Valley Ford Water Association (Water Association). Their water supply is of poor quality. Quarterly nitrate monitoring shows the maximum nitrate level is frequently exceeded, and monthly bacteriological sampling shows frequent positive total coliform and occasional E. coli detections at all three wells. The Water Association is in the process of submitting an application to the Drinking Water State Revolving Fund for a construction project that includes connection to a well, installation of a proposed treatment facility, and disconnection from the existing wells. In addition, the North Coast Regional Water Quality Control Board is planning to conduct a nitrate source investigation in the Valley Ford area (State Water Resources Control Board, personal communication, April 2017).

Bodega Bay Public Utility District

The Bodega Bay Public Utility District (Bodega Bay District) provides water service to the residential, commercial, and industrial development in Bodega Bay, including the Bodega Harbour Subdivision, U.C. Davis Bodega Marine Laboratory, U.S. Coast Guard, County Doran Park, County Westside Park, and State Dunes Campground. Its water service area is slightly greater than its sewer service area. Most of the vacant lots in the Bodega Bay District are in the Bodega Harbour and Harbor View subdivisions. The sources of water for the District are the Sand Dunes wellfield (north of Bay Flat Road on the north end of the harbor) and Roppolo wellfield (west of Bay Flat Road on the west side of the harbor), and two wells next to Salmon Creek north of Bodega Bay. Saltwater intrusion has limited the Roppolo wellfield to less than full capacity. The State Department of Water Resources prohibits use of the wells next to Salmon Creek when water depth in the creek drops below ten inches.

The most recent Municipal Service Review of the Bodega Bay District by the Local Area Formation Commission (LAFCO) was in 2004 and identified 1,797 existing Residential Unit Equivalents (RUEs). Most of this capacity went to the Harbor View development of 84 units, including 14 affordable units, developed by Burbank Housing Development, Inc. The Bodega Bay District's 1998 Master Water Plan identifies the need for a new well and additional water storage to serve the future demand from the previous Bodega Bay Phase I Land Use Plan. The Bodega Bay District constructed a 500,000-gallon water storage tank on District property in July 2003. Permits were issued in 2016 for a new well and water treatment plant off Bay Flat Road, but as of March 2017 they were not in operation.

Duncans Mills Trading Company and Camping Company

Duncans Mills Trading Company and Camping Company provides water to the Duncan Mills Camping Club Campground, retail shops, and restaurant at Duncans Mills. The source of the water is a well located 1,400 feet from the Russian River.

Russian River Utility – Sereno del Mar Water Company and Carmet-by-the-Sea Mutual Water System

As of 1999 Russian River Utility owns and manages the Sereno del Mar Water Company, a private investor-owned water company; and operates under a contract with the Carmet-by-the-Sea Mutual Water System, a non-profit corporation. Located on State Highway 1 between Jenner and Bodega Bay, the Sereno del Mar Water Company was established in 1970 when the Sereno del Mar subdivision was developed. The Gleason Beach subdivision was added to its service area in 1976. The adjacent Carmet-by-the-Sea Mutual Water System receives treated surface water from the Sereno del Mar Water Company which serves the Carmet subdivision. In 2007 the Sereno del Mar Water Company served 124 customers and had issued permits for 168 water service connections.

The Sereno del Mar Water Company financed construction of a new 212,000-gallon storage tank and source wells completed in 1999. Russian River Utility financed renovation of the surface water treatment plant, a state-of-the-art micro-filtration membrane facility completed in 2001; and Carmet-by-the-Sea Mutual Water Company financed consolidation of the water treatment services at Sereno del Mar completed in 2003. The two companies now operate a joint water source treatment and storage system but are managed separately.

The 1981 Local Coastal Plan addressed the need for the Sereno Del Mar Water Company to prove an adequate water supply for buildout of the Sereno del Mar, Carmet, and Gleason Beach subdivisions pursuant to a State Department of Health Services moratorium limiting the total number of allowable water service connections to 109. In April 2005 the Sereno del Mar Water Company proved an adequate water supply for connections to all existing and future development in these subdivisions.

The Sea Ranch Water Company

The Sea Ranch is a planned community served by The Sea Ranch Water Company. The Water Company's service area encompasses the entire Sea Ranch Association with 2,289 lots including, seven non-Association residential customers, 24 commercial customers. The water supply has a production capacity of 1.58 million gallons per day (MGD) and a treatment capacity of 1.01 MGD. Water Company staff estimate that

maximum daily demand at buildout (2,289 units) will be 0.80 MGD, and indicate that based on present water consumption and population projections, the Water Company will be able to meet the present and future demand for The Sea Ranch.

Timber Cove County Water District

The 1981 Local Coastal Plan addressed the need for the Timber Cove Mutual Water Company to meet current health standards for water system design and supply so that the County can allow over 100 water connections to the Timber Cove subdivision. On May 7, 1984 the Timber Cove Mutual Water Company was terminated and the Timber Cove County Water District was formed. On February 9, 1995 the County Board of Zoning Adjustments granted a Coastal Permit for construction of a water reservoir with capacity for 30 acre-feet, small water treatment plant, and water pipe on Timber Cove Road. These water system improvements were constructed in 1997.

Extension of public water outside of designated Urban Service Areas is also an important public water supply issue. Often, water managers are interested in extending service boundaries to increase the size of the ratepayer base in order to fund improvements. However, such extensions can lead to inappropriate sprawl and increase development pressure in rural areas.

On the other hand, these extensions can provide needed supplies to existing development on nearby properties that may be experiencing problems with private wells that are either running dry or becoming contaminated. In many such cases, drilling a new well does not resolve the problem. As a result, policy is needed that balances the needs of existing residents and the public interest in avoiding sprawl.

3.2 Wastewater Treatment and Disposal Services

Untreated or improperly treated wastewater contains bacteria, viruses, chemicals, and nutrients that can cause human diseases; kill or injure plants and animals; and produce surface waters that are contaminated, discolored, or odorous. Since all wastewater is eventually returned to the environment, the public has a vital interest in assuring proper wastewater management. The Water Resources Element establishes goals, objectives, and policies pertaining to water quality and wastewater management. This section of the Public Facilities and Services Element addresses issues regarding improving existing wastewater treatment systems, developing new wastewater treatment systems, and extending wastewater treatment services to new areas not currently served.

3.2.1 On Site Wastewater Treatment Systems

An on-site wastewater treatment system (OWTS) is an individual wastewater treatment and dispersal system, small community collection, treatment and dispersal systems, or alternative collection and dispersal systems that use subsurface dispersal. These systems are commonly referred to as "septic systems". OWTSs do not include graywater systems pursuant to the Health and Safety Code Section 17922.12.

A standard OWTS consists of a tank and leachfield (subsurface treatment and disposal of wastewater) and may include a diversion valve and/or pump. Wastewater enters the tank and is retained long enough so that large solid particles and very small solid particles joined together settle to the bottom. Bacteria digest the solids that accumulate in the tank at the bottom (sludge); and the fats, oils, grease, and other materials that float to the surface (scum); the resulting solids must be pumped out periodically. The partially treated wastewater (effluent) leaves the tank in pipes and is discharged below the ground surface into the leachfield, which consists of perforated pipes laid over gravel in trenches (leachlines). The effluent flows along the length of the pipes where it gradually percolates into the soil. The effluent receives secondary treatment through natural physical and microbiological processes in the soil.

A standard OWTS distributes effluent through a series of leachlines, which are sections of perforated pipe located in trenches which are backfilled with gravel. Effluent flows through one leachline at a time. As one leachline clogs, the effluent flows via a distribution box to the next leachline; when the last leachline clogs, individual leachlines or the entire leachfield must be replaced.

Deep and biologically active soils with relatively long retention times before effluent contacts groundwater are ideal conditions for the siting of OWTSs. Unfortunately, most of the Sonoma County coast consists of relatively sandy soils, poorly drained clay, highly weathered and fractured bedrock, or high groundwater. Without sufficient retention time for secondary filtration and treatment as effluent percolates through the soil these conditions allow effluent to move rapidly into local groundwater and or discharge to the ocean. In areas with poorly draining clay soils, effluent can pool at the surface, creating potential public health problems through human contact and impacts to coastal resources through discharges to surface waters or Environmentally Sensitive Habitat Areas.

New and replacement OWTSs shall be located, designed, constructed, and operated in a manner to ensure that sewage effluent does not surface at any time, that is protective of public health, safety and the environment and that percolation of effluent into the soil will not adversely affect beneficial uses of the waters of the State of California. (OWTS Manual)

The OWTS Manual establishes standards for all on-site wastewater systems in Sonoma County. These standards implement provisions of the Porter Cologne Water Quality Control Act, the State Water Resources Control Board OWTS Policy, and applicable sections of Sonoma County Code Chapters 7 and 24. California Water Code 13282 authorizes counties to adopt and enforce regulations, conditions, restrictions, and limitations regarding the dispersal of waste. The Sonoma County OWTS Manual is the local implementation of this authority.

In the coast, most soils are not well suited for installation of an OWTS will require installation of a non-standard experimental or alternative system. Non-standard OWTSs are used to overcome one or more adverse site or soil condition such as high groundwater, slowly permeable soils, or other limiting condition or where increased wastewater treatment is needed. Unlike conventional OWTSs, non-standard OWTSs vary in design and concept depending on the site and soil conditions. (OWTS Manual)

On coastal parcels, meeting OWTS standards is often the limiting factor for development. On many lots it is difficult to meet the setbacks to property lines, road cuts, streams, drainage courses, cliffs, and the 10-year floodplain due to the small size of the lots, which in many cases were created prior to current OWTS regulations. For example, on small lots in Carmet, Jenner, Sereno del Mar and Salmon Creek, even if the soil has an adequate percolation rate, there is not enough room for even a one-bedroom OWTS. A lot fronting Salmon Creek that is 40 feet long will not meet the required 100-foot setback from the 10-year floodplain. Steep slopes and shallow fractured bedrock also contribute to inadequate conditions for OWTS, as the effluent can move laterally and break out to the surface along the slope.

On Site Wastewater Treatment Systems Regulations

The State Regional Water Quality Control Boards (Regional Board) is responsible for establishing standards for OWTSs to protect water resources and public health. Permit Sonoma is the delegated authority for implementation and enforcement of State and County specific OWTS regulations. New OWTSs must meet standards for slope, soil depth, depth to groundwater, percolation rate, and system setback distance.

In areas where failure of OWTSs are likely to cause health hazards or impair water quality, Permit Sonoma or the pertinent Region Board (North Coast or San Francisco Bay) may issue an Order to prohibit any waiver of existing OWTS installation regulations in a specific area. This Order referred to as a "Waiver Prohibition Area," is intended to decrease the likelihood of failure of new OWTSs. Jenner, Rancho del Paradiso, Sereno del Mar, Carmet, and Salmon Creek are in Waiver Prohibition areas.

On May 13, 2013, the North Coast Regional Board amended their Basin Plan to adopt the Septic System Policy. The Septic System Policy sets minimum standards for OWTSS that are constructed or replaced or are subject to a major repair. The Septic System Policy also includes minimum operating requirements for OWTSS that include requirements for siting, construction, and performance; OWTSS near certain waters listed as impaired under Section 303(d) of the Clean Water Act; corrective action; monitoring; exemption criteria; determining when an existing OWTS is subject to major repair; a conditional waiver of waste discharge; and authorizing local agency implementation of the Septic System Policy.

Alternatives to Standard OWTS

A Non-Standard system is a type of OWTS that utilizes a method of wastewater treatment that may or may not include a conventional OWTS tank and/or method of wastewater dispersal other than a conventional drain field for the purpose of producing an equal to or greater quality wastewater effluent and improved performance of and siting for effluent dispersal than a standard OWTS. There are two types of non-standard systems: Experimental and Alternative.

An Experimental OWTS is a non-standard OWTS deemed conditionally acceptable by the Regional Water Quality Control Board, subject to increased performance monitoring and evaluation, prior to acceptance as an approved non-standard Alternative OWTS.

An Alternative OWTS is an approved non-standard OWTS that has demonstrated in the non-standard Experimental phase to function in such a manner as to protect water quality and preclude health hazards and nuisance conditions, and is capable of producing an equal to or greater quality wastewater effluent and improved performance of and siting for effluent dispersal than a standard OWTS. (OWTS Manual)

Alternative OWTSs disperse the effluent under pressure to the disposal field, allowing the effluent to percolate throughout the entire soil area designed to treat the effluent. Greater treatment of effluent occurs when it passes through a larger soil mantle or area of soil. In contrast, a standard OWTS uses a small portion of the designed soil treatment area, as effluent flows by gravity to the beginning of a leach line where it disperses. This process continues until an entire leachline is filled up and then the effluent overflows by gravity to the next leachline.

Alternative OWTSs consist of in ground systems and above ground systems. In ground systems include shallow trench pressure distribution systems, shallow in-grade systems, and subsurface drip dispersal systems. Above ground systems include mound systems, at-grade systems, and bottomless sand filters. Pretreatment units are County approved

advanced treatment units that provide pretreatment of wastewater and improve the wastewater quality prior to dispersal into the soil. These systems can be used with either standard or alternative OWTs and are included in our Alternative Non-Standard System program.

Alternative OWTs that may be feasible for individual sites on the Sonoma County are the mound, shallow trench pressure distribution, at-grade, drip dispersal, alternative and/or standard systems with pretreatment, common leachfield, and on-site wastewater system monitoring and maintenance program (on-site wastewater disposal zone).

Above Ground Alternative OWTs. The Mound, At-Grade and Bottomless Sand Filter systems, with or without pretreatment, are used in areas where a high water table, poor soil, or shallow bedrock prohibit the use of trenches in the standard system. The pressurized leachlines are installed above the existing grade to assure the effluent is properly treated – sand (mound) or gravel (At-grade) is placed on top of the existing soil, and a pipe distribution system is laid down. The above ground system assures adequate filtration of the effluent before it reaches the groundwater or impervious soil lens. Bottomless sand filters are not approved for undeveloped parcels. The mound system is the most promising OWT for dealing with the common coastal problems of clay soils and seasonally high groundwater levels. However, the mound system requires a lot size of about two acres and slopes of less than 20 percent, and more homeowner maintenance compared to a standard OWT. Therefore, the applicability of the mound system on the Sonoma County coast is limited.

In Ground Alternative OWTs. The Shallow Trench Pressure Distribution, Shallow In-Ground and Subsurface Drip Dispersal systems, with or without pretreatment, may be used when there is an increased depth of soil and/or groundwater than that which would require an Above Ground OWT installation, but less than the requirements for a standard OWT. Due to the decreased leachfield size requirements, the subsurface drip dispersal is the most promising OWT that may be applicable for certain coastal parcels. However, due to site constraints as mentioned above (poor soils, depth to groundwater, parcel size), the applicability of the subsurface drip dispersal system on the Sonoma County coast is limited as well.

Common Leachfield. A common leachfield is a leachfield shared by several properties, located on a separate property of adequate size with proper site conditions. Each property has an OWT tank and piping leading to the common leachfield. The common leachfield is usually larger than the leachfield for an OWT. Systems shared in common with other property owners are prohibited except with County Board of Supervisors and RWQCB authorization.

OWTS Monitoring and Maintenance Program (On-Site Wastewater Disposal Zone). An OWTS monitoring and maintenance program, also referred to as an on-site wastewater disposal zone, is another alternative to individual OWTSs. Such a program does not make more lots buildable, rather has the potential for extending the useful life of OWTS and promptly correcting operational problems. A public agency which is authorized to acquire, construct, maintain, or operate sewage treatment systems may run such a program. Once an on-site wastewater disposal zone is established, the agency has the power within that zone to acquire, design, own, construct, install, operate, monitor, inspect, and maintain individual OWTSs. The potential for this type of program is widespread on the Sonoma Coast.

A wastewater system monitoring and maintenance program is required for The Sea Ranch. In the late 1980s The Sea Ranch Association and the County of Sonoma created an On-Site Wastewater Disposal Zone (Zone) to address problems with about 1,570 on-site individual OWTSs at The Sea Ranch. In July 1989 the Zone was created under the agreement that the Board of Supervisors would contract with The Sea Ranch Association to operate, monitor, inspect, and maintain the OWTSs. In July 1995 the Zone was designated as CSA 41 and came under the direction of Permit Sonoma.

Areas with Severe Limitations for OWTSs

Nearly all developed or vacant parcels in the Sonoma County coast have severe limitations for installation and continued operation of individual OWTSs. Existing developed areas in Windemere Point North of Fort Ross, Duncans Mills, Bridgehaven, Goat Rock Headlands, Valley Ford, Jenner, Rancho del Paradiso, Sereno del Mar, Salmon Creek, Wrights Beach, Gleason Beach, and Carmet benefit from the addition of disinfection and pretreatment to existing systems or construction of community leachfields or clustered systems.

Windemere Point North of Fort Ross. Limitations for OWTSs in this area include shallow soils, impermeable soils, and elevated groundwater. About ten percent of the parcels in this area can accommodate an OWTS.

Duncans Mills. Limitations for OWTSs in this area include sandy soils that drain too fast, high groundwater, proximity of the water system, required setback from the floodplain, and required setback from the Russian River.

Bridgehaven. This area adjacent to the Russian River has cesspools and seepage pits. Limitations for OWTSs include very small lots, slowly draining soils, high groundwater, and required setback from the Russian River. The area cannot accommodate any new individual OWTSs.

Goat Rock Headlands. This area of low residential density has antiquated OWTs, slowly draining soils, and high groundwater.

Valley Ford. Valley Ford has very shallow soils, high groundwater, and low availability of water.

Jenner. Jenner has the highest density and the most severe OWTs problems than any other residential area on the Sonoma County coast. Limitations for OWTs in Jenner include very small lots, steep slopes, impermeable soils, and high groundwater. As in Salmon Creek and Carmet, even if the soil on a lot has an adequate percolation rate, there is not enough room for even a one-bedroom OWT. The area cannot accommodate any new OWTs.

Rancho del Paradiso. Limitations for OWTs at Rancho del Paradiso include very steep slopes; very small lots; shallow impermeable soils; high groundwater; seasonal flooding; and a water system with water quality problems.

Salmon Creek. Salmon Creek has cesspools and seepage pits. Effluent from these systems drains to the water system. Limitations for OWTs at Salmon Creek include very small lots, fast draining soils, high groundwater, and required setback from Salmon Creek (some systems are in the creek). There is a limited water supply and problems with water quality. As in Jenner and Carmet, even if the soil on a lot has an adequate percolation rate, there is not enough room for even a one-bedroom OWT.

Wrights Beach. Limitations for OWTs at Wrights Beach include small lots, shallow soils, high groundwater, and potential for breakout of effluent on the bluffs. There is a limited water supply and problems with water quality.

Gleasons Beach. Most, but not all individual systems have been abandoned as coastal erosion has reduced lot size and destroyed all but 8 of the original 21 homes. A community leachfield was constructed in 2000 to serve all homes in this area, but only half of the remaining 8 homes are connected to the system. Realignment of Highway 1, sea level rise, and a bluff retreat rate of more than one foot per year will likely begin to destroy the leachfield within the next 15 years. The realignment of Highway 1 reduces opportunities for relocating the community leachfield and none of the homes have potential for on-site disposal fields. **(New)**

Carmet. Limitations for OWTs in Carmet include small lots, shallow soils, and high groundwater that is almost at the ground surface. As in Jenner and Salmon Creek, even if the soil on a lot has an adequate percolation rate, there is not enough room for even a one-bedroom OWT. Vacant lots do not meet the criteria for an alternative system.

Sereno del Mar. Sereno del Mar is a subdivision of relatively new homes - construction started in the late 1970s. Limitations for OWTSSs in this area include steep slopes, slowly draining soils, and seasonally high groundwater. Lot size tends to be less than one acre, but not so small as to exclude even a one-bedroom house. Over the last 25 years, mainly non-standard mound OWTSSs have been permitted in Sereno del Mar due to the high groundwater. The area is traversed by a fault line, which may contribute to the high groundwater. Soil in the area is predominately a shallow loam to sandy loam over clay. However, near State Highway 1 there is well-drained sandy loam to about 8 feet, where standard OWTSSs would meet all requirements. Where groundwater is high, some property owners have obtained an easement onto the ranch behind and adjacent to Sereno del Mar in order to have more land to meet OWTSS requirements. The community has a public water system.

The Coastal Subdivisions of Carmet, Rancho del Paradiso, Salmon Creek, Sereno del Mar, and the Community of Jenner are County Waiver Prohibition areas. This means that waiver requests for new construction of structures on vacant lots and construction on existing structures that would result in an increase in flow are prohibited.

Areas without Severe Limitations for OWTSSs

There are areas along the Sonoma Coast where the limitations for individual OWTSSs are not so severe. There are only four subdivisions where new OWTSSs can be installed on most vacant lots: Fort Ross Highlands, The Sea Ranch, and Timber Cove. Even at The Sea Ranch and Timber Cove, there is concern about the cumulative impacts of OWTSS discharges as the areas become more developed.

Fort Ross Highlands. Constraints to OWTSSs in this area include shallow soils and high groundwater in winter.

The Sea Ranch. The Sea Ranch has complex topography and soils. Two sewage treatment plants owned by the Sonoma County Water Agency serve units at the north end and in the central area of The Sea Ranch (see "Sewer Services" below). The remainder of the community is served by individual OWTSSs. An on-site wastewater management district oversees the monitoring and compliance of the OWTSSs and reports to the North Coast RWQCB and Permit Sonoma annually. Over the last 10 years, the majority of OWTSSs have been permitted in the commons area due to the presence of good soil (Baywood fine sandy loam) and adequate depth to groundwater. Some homes are over 1/4 mile from this disposal site in the commons area because the lot is too small or the soil is too shallow to support OWTSSs. As of March 2006 the commons area still contained room for additional clustered OWTSSs. Permit Sonoma anticipates construction of more drip dispersal and at-grade alternative OWTSSs in the future at The

Sea Ranch, as these alternative systems take up less area than many other standard and alternative systems (see “Alternatives to Standard Individual OWTs” below). A common disposal system should be considered to reduce the large number of individual leach lines across The Sea Ranch. Many homes could use one OWT tank, or many OWT tanks could combine into a transmission line that then flows to a common leachfield. The Sea Ranch Central Sanitation Zone should be expanded to include the Sea Ranch Lodge and Blackpoint Beach, the areas with the most OWT problems and where breakout of wastewater has occurred on the bluffs.

Timber Cove. Limitations to OWTs at Timber Cove include very small lots, steep slopes, shallow soils, and high groundwater. The water supply is limited. Most of the OWTs at Timber Cove are non-standard alternative systems. It is not possible to build on most vacant lots.

GOAL C-PF-2: **Ensure that growth and development match existing water and wastewater treatment and disposal capacities.**

Objective C-PF-2.1: Plan for growth and development to match existing water and wastewater treatment and disposal capacities and facilities.

Objective C-PF-2.2: Operate County water and wastewater treatment and disposal facilities in compliance with applicable State and Federal standards.

Objective C-PF-2.3: Help resolve water problems resulting from proliferation of small water systems.

Objective C-PF-2.4: Limit extension of public water and sewer services into rural areas.

The following policies, in addition to those in the Water Resources and Open Space and Resource Conservation Elements, shall be used to achieve these objectives:

Policy C-PF-2a: Growth and development shall be planned in accordance with existing water and wastewater treatment and disposal capacities and facilities in accordance with California Coastal Act. Development, including land divisions, shall be prohibited unless adequate water and wastewater treatment and disposal capacities and facilities exist to accommodate such development. In acting on any Coastal Development Permit, determine that adequate capacity is available and reserved in the system to serve Coastal Act priority land uses (i.e., coastal-dependent uses, agriculture, essential public services, and public recreation; see Land Use Element, Table C-LU-2). In areas with limited service capacity, new development for a non-priority use, including land

divisions, not specified above shall only be allowed if adequate capacity remains for Coastal Act priority land uses. **(New)**

Policy C-PF-2b: A public water or wastewater district shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with the Local Coastal Plan in accordance with California Coastal Act Section 30254. New development within the service boundary of a public water or wastewater district shall be required to connect to the district for water or wastewater service. **(New)**

Policy C-PF-2c: A Coastal Permit shall be required for water or wastewater management facility expansion or improvement projects unless otherwise exempt by the Local Coastal Program. Development of new or expansion of existing water or wastewater management facilities shall be in phase with the availability of other public works infrastructure. **(New)**

Policy C-PF-2d: Master plans or equivalent documentation shall be prepared for all water and wastewater management systems prior to approval of facility expansion or improvement projects. All facilities shall be designed and constructed in accordance with the existing and planned development in the applicable jurisdictions. In the event that a master plan or monitoring fails to show adequate facilities or supplies for existing development, zoning changes, building permits, or other entitlements in order to protect services to existing residents.

The minimum contents necessary for an adequate master plan or equivalent documentation are:

- (1) Maps showing potential future service area boundaries in accordance with California Coastal Act Section 30254.
- (2) Existing development within the existing and potential future service area boundaries.
- (3) Projected growth and the related service and facility needs;
- (4) Estimated costs and revenues for needed improvements;
- (5) System design parameters and assumptions;
- (6) A program for water use reduction; and
- (7) A program to reduce stormwater infiltration. **(GP2020)**

Policy C-PF-2e: Extension of public sewer services outside of the boundary of The Sea Ranch and Bodega Bay Urban Service Areas shall be avoided. Exceptions to this policy shall be considered, to the extent allowed by law, only:

- (1) Where necessary to resolve a public health hazard resulting from existing development (i.e., contamination of land, surface water, or groundwater resulting from failure of an existing OWTS or other wastewater management system); or
- (2) Where appropriate to allow for development of public park or recreation facilities.

A Coastal Permit shall be required for extension of public sewer services outside of an Urban_Service Area.

Where several failing OWTSs or other health and safety problems which pose a significant hazard to human health and safety exist outside an Urban Service Area that could be addressed by extension of public sewer service, use Outside Service Area Agreements which limit the use of existing development. The evaluation should assure sufficient capacity to serve existing connections and potential buildout in the existing Urban Service Area.

A Coastal Development Permit shall be required for extension of public sewer services outside of an Urban Service Area. **(GP2020 Revised)**

Policy C-PF-2f: The following guidelines shall be used for any exception allowed by **Policy C-PF-2e:**

- (1) The property must adjoin the Urban Service Area Boundary, or the proposed connection to a public sewer system must be no more than 200 feet from the Urban Service Area Boundary;
- (2) Size sewage facilities to serve development consistent with the Local Coastal Plan;
- (3) Require written certification that adequate service capacity is available for the use to be connected to the system; and
- (4) Use agreements, covenants, and zoning to limit the growth inducement potential of extension of public sewer services. **(GP2020 Revised)**

Policy C-PF-2g: Extension of public water service to a property that is outside the boundary of an Urban Service Area or Rural Community (i.e., Duncans Mills, Jenner, Sereno del Mar, Carmet, Salmon Creek, Timber Cove, and Valley Ford) shall be avoided. Exceptions to this policy shall be considered, to the extent allowed by law, only:

- (1) Where necessary to resolve a public health hazard resulting from existing development (i.e., failure of water wells or contamination of land, surface water, or groundwater resulting from failure of an existing OWTS or other wastewater management system); or
- (2) Where appropriate to allow for development of public park and recreational facilities.

A Coastal Permit shall be required for extension of public water service. **(GP2020)**

Policy C-PF-2h: The following guidelines shall be used for any exception allowed by **Policy C-PF-2g:**

- (1) Size facilities to serve development consistent with the Local Coastal Plan;
- (2) Require written certification that adequate service capacity is available for the use to be connected to the system or planned to be connected in the future; and
- (3) Use out-of-service area agreements that limit the use to existing development rather than annexations. **(GP2020)**

Policy C-PF-2i: Applications for subdivision of land or new development or uses within a water or wastewater service area shall be required to include written certification from the service provider that existing water and wastewater services are available to serve the new parcels, development, and uses; or that the service provider will make improvements to the water or wastewater systems necessary to accommodate the new development and uses prior to final project approval. The proposed project shall not be considered for approval if this written certification is not provided. **(Existing LCP Revised)**

Policy C-PF-2j: When considering formation of new water service agencies, systems owned and operated by a governmental entity shall be favored over privately or mutually owned systems. New privately or mutually owned systems shall be authorized only if system revenues and water supplies are adequate to serve existing and projected growth for the life of the system, which shall be ensured through agreements or other mechanisms that set aside funds for long-term capital improvements and operation and maintenance costs. **(GP2020)**

Policy C-PF-2k: Approval of new wastewater treatment and disposal systems owned and operated by a governmental entity shall be considered only when necessary to resolve an existing public health hazard. **(GP2020)**

Policy C-PF-2l: New privately owned package treatment plants which serve multiple uses or serve separate parcels shall be avoided. Use of package treatment plants to serve affordable housing or other projects on a single parcel under one ownership shall be allowed provided that they comply with the following criteria:

- (1) The package treatment plant must comply with water quality and health standards and protect water resources;
- (2) The design and appearance of package treatment plants located in agricultural and other rural areas must be compatible with the rural area's character;

- (3) The project must include provisions for the long-term operation, maintenance, and eventual replacement and/or removal of the package treatment plant; and include adequate financing for these provisions through bonds, sinking funds, or other mechanisms; and
- (4) The package treatment plant is not to be used as a basis for approving a new affordable housing development in Rural Communities or on other rural land, or amending the Local Coastal Plan to allow for more intensive development.
(GP2020)

Policy C-PF-2m: Consider use of alternative (non-standard) sewage disposal systems only to serve a single land use on a single parcel, and only if the availability of the system does not result in new development, except as allowed by the Local Coastal Plan. **(GP2020)**

Policy C-PF-2n: Any waiver of Regional Board standards for on-site wastewater disposal in Jenner, Carmet, Rancho del Paradiso, Sereno del Mar, and Salmon Creek shall be prohibited. **(Existing LCP Revised)**

Policy C-PF-2o: Consider development or expansion of a community wastewater treatment system in areas with widespread OWTS problems that are a health concern and cannot be addressed by an on-site wastewater maintenance and management program, in compliance with the policies of this Local Coastal Plan. **(GP2020)**

Policy C-PF-2p: Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development in accordance with California Coastal Act Sections 30222 and 30254. The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority consistent with coastal priority land uses of the Coastal Act. **(New)**

4. PARKS AND RECREATION SERVICES POLICY

Outdoor recreation contributes to the tourism economy, enhances the quality of life for County residents and visitors, and conserves unique natural and cultural resources. The Public Facilities and Services Element describes the current status of public recreation in general terms of service capacity and demand in relation to projected growth. The needed park and recreation facilities are identified and addressed in the Public Access Element.

The various types of parkland found in Sonoma County are based on the Board of Supervisors approved parkland classification system. County planning staff considers a variety of factors in determining the need for local parks (e.g., Neighborhood and Community Parks) and the more intensively developed park and recreation facilities (e.g., Regional Recreation Areas). These factors include, but are not limited to, community preference, nearby population densities, proximity to other recreational areas and facilities, local and regional tourism, and accessibility, among others. Parkland needs for the resource-based park and recreation facilities (e.g., Regional Open Space Parks, Preserves, and Trails) are determined by these and other criteria, and are described in the Public Access Element.

Goal C-PF-3: Provide adequate park and recreation services on the Sonoma County coast.

Objective C-PF-3.1: Provide an adequate supply and equitable geographic distribution of regional and local park and recreation services based on population projections, estimated user demand, and Local Coastal Plan resource objectives.

Objective C-PF-3.2: Use guidelines established by the Board of Supervisors as the minimum standards for determining park needs.

The following policies, in addition to those in the Open Space and Resource Conservation and Public Access Elements, shall be used to achieve these objectives.

Policy C-PF-3a: The Public Access Element and Plan shall be used to determine regional park needs, including County regional open space parks, County trails, and State parks in order to support recreation in the Coastal Zone. **(New)**

Policy C-PF-3b: The proposed accessway, park, and trail descriptions in the Public Access Plan shall be used to determine Local Coastal Plan consistency of proposed accessways, parks, and trails as consistent with the Public Access Element. **(GP2020)**

Policy C-PF-3c: Continue to implement park impact mitigation that allows for the dedication of land, the payment of fees, or both as a condition of approval for development projects. **(GP2020)**

5. PUBLIC EDUCATION SERVICES POLICY

5.1 Schools

As the Sonoma County coast has relatively low population densities, schools are widely spaced in five Elementary School Districts and three High School Districts, and tend to

be small with combined classes. Specialized education facilities are minimal. Each school district has its own revenue base, elected board, and administration. The Sonoma County Office of Education provides some administrative and business services to all districts. **Figures C-PF-1a to C-PF-1c** show the Public School Districts on the coast.

A major issue in planning for new facilities is the need for increased coordination between land use and facilities planning. Districts must be aware of the projected residential growth in their service area so that new school needs can be accurately forecast. An important source of financing for new school facilities is the "school impact" fee on new residential construction. State law now authorizes local school districts to charge development fees for permanent facilities. However, funding will likely continue to depend on State sources. California law also enables a County to acquire new school sites by dedication as a condition of subdivision approval.

5.1.1 Elementary Schools

All elementary school districts must meet minimum state requirements regarding class sizes. Maximum class sizes for grades K-8 vary per California Education Code sections 41376 and 41378, which prescribe the maximum class sizes and penalties for districts across California. For Kindergarten, the average class size must not exceed 31 students, with no class larger than 33 students; for grades 1-3, the average class size must not exceed 30 students, with no class larger than 32 students; for grades 4-8, the average class size must not exceed either 29.9 students or the average of the district in 1964, whichever is smaller. Additional classrooms are usually constructed only when these limits are reached.

Horicon Elementary School District. Horicon Elementary School District consists of one school, Horicon Elementary School, which is located in the community of Annapolis. Enrollment at Horicon Elementary School decreased from 80 students in four classrooms in 1979 to 47 students in four combined classrooms at the start of the 2015-2016 school year. According to the District, the number of students has been declining, as is common with general school enrollment trends statewide. Over the last eight school years, the student population has fluctuated between 70 students in 2011, 57 students in 2012, 60 students in 2013, 66 students 2014, 61 students in 2015, 47 students in 2015-2016 school year, 59 students in the 2016-2017 school year, 62 students in the 2017-2018 school year before reaching a total of 69 students in the current 2018-2010 school year. The school serves students from the communities of The Sea Ranch and Annapolis. According to the District, there is no anticipated growth or need for additional facilities.

Fort Ross School District. The Timber Cove Subdivision is the largest planned residential development in, and the main growth area for, the Fort Ross School District. Enrollment at the Fort Ross Elementary School decreased from 53 students in two classrooms in 1979 to 32 students in two classrooms during the 2014-2015 school year, to 28 students in two classrooms during the 2015-2016 school year. Since then the student population continues on the downward trend having 24 students in the 2016-2017 school year, 19 students in the 2017-2018 school year, and finally 21 students for the current school year. The District has seen a fluctuation within the last few years between 27 and 32 students, but generally the District enrollment has been steadily declining over the last 20 years. The District has a preschool site within a classroom at the Fort Ross Elementary School which is run by River to Coast Children's Services based in Guerneville. However, there is no current enrollment at the preschool. When enrollment resumes, the River to Coast Children's Services would remain responsible for running the preschool program at the school.

Monte Rio School District (outside Coastal Zone). Coastal areas are not expected to contribute significant numbers of new students to the Monte Rio School District. Enrollment at Monte Rio Elementary School decreased from 219 students in eight classrooms in 1979 to 112 students in six classrooms in 2005. There has been an additional decrease in student population figures, with 84 students using nine classrooms in 2015. The District believes that the decline in enrollment is due to the decrease in families moving to the area. The 2015-2016 school year brought one additional student to make 85 students for the school year, 90 students in 2016-2017, the 2017 to 2018 school year had 89 students, and 84 students in the current school year of 2018-2019. The District projects a decrease in enrollment in the future for the same reason.

Harmony Union School District. Harmony Union School District contains two schools at the same site to the south of Occidental: Harmony Elementary School (preschool, Kindergarten, and grade 1) and Salmon Creek School – A Charter School (grades 2-8). The District receives some students from Occidental, Freestone, and portions of Bodega, and Monte Rio. Enrollment in the District increased from 419 students in 1979 to almost 700 students in the late 1980s. Within the last ten years, however, a substantial decrease in enrollment has occurred, with 292 students in 15 classrooms in 2005 and only 235 total students in twelve classrooms in 2015. The 2016-2017 school year had 245 students, 2017-2018 had 256 students, and the current 2018-2019 student population of 249. The District believes that the decline in enrollment is due to aging population trends and the significant increase in housing costs.

Shoreline School District. South Coast students attend Bodega Bay Elementary School for grades K-5, and are bused to Tomales Elementary School (outside of Sonoma County Coastal Zone) for grades 6-8. As most students attending Bodega Bay Elementary School are from the immediate area, construction of additional classrooms would be needed to accommodate additional Bodega Bay area growth. Enrollment at the Bodega Bay Elementary School decreased from 70 students in three classrooms in 1979 to 40 students in three classrooms in a new school in 2005, to 19 students using two classrooms in 2015-2016 school year. Since then there was a slight increase to 25 students for the 2016-2017 school year, 26 students in 2017-2018, and 23 students in the current school year 2018-2019. The District believes that enrollment numbers could fluctuate because of interdistrict transfers largely from Coast Guard families.

5.1.2 High Schools

The Sonoma County coast is served by three high schools in three school districts, none of which are on the coast. Students from Annapolis, The Sea Ranch, and Stewarts Point attend Point Arena High School in Mendocino County; students from Fort Ross through Bodega Bay attend El Molino High School in Forestville, and South Coast students attend Tomales High School in Marin County.

Impacts of growth on high schools are not as severe as for elementary schools and are harder to estimate. Class sizes, schools, and district areas are larger. High schools have more flexibility in handling increments of students from specific development areas without adding classrooms or teachers.

Goal C-PF-4: **Provide school facilities adequate to meet the future needs of Sonoma County coast residents.**

Objective C-PF-4.1: Accommodate new school sites as needed.

The following policies shall be used to achieve these objectives:

Policy C-PF-4a: Continue to implement school impact mitigation that allows for the dedication of land, the payment of fees, or both as a condition of approval for development projects. **(GP2020)**

6. FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES POLICY

6.1 Fire Protection Services

Fire protection and emergency medical and rescue services are essential to the protection of life and property in the unincorporated areas of Sonoma County. They are provided by four types of agencies. The California Department of Forestry and Fire Protection (CalFire) provides services to State Responsibility Areas. Fire Protection Districts provide services with revenues from property taxes, and are usually created to provide a reliable funding source to sustain a stable and/or increased level of fire protection services to certain areas of the County. Volunteer fire companies provide local services in rural communities. CSAs and Community Service Districts (CSDs) are areas of the County which bear a special tax assessment for particular types of extended services, such as structural fire protection; they rely primarily on volunteer staff.

CSA 40 is a County entity that provides a moderate amount of funding and relies primarily on volunteer staff in various CSAs. CSA 40 also provides management oversight for, directs, and coordinates the various volunteer fire companies; and supplies training, safety equipment, and insurance coverage for voluntary staff.

The County has established the Department of Fire and Emergency Services (DES) to coordinate the fire protection service agencies in the County. DES contracts with various Fire Protection Districts and municipal fire agencies to provide support services including code enforcement, construction plan checking, and fire safe planning.

Fire protection services are highly dependent on paid on-call, paid part-time, and volunteer personnel. Although this dependency remains, the number of volunteer firefighters has fallen off in recent years. While the County generally has been receiving acceptable levels of fire protection services, problems have resulted from the condition of existing equipment and matching the type of equipment and staff training to the type of fire. The Bodega Bay Fire Protection District; and The Sea Ranch, staffed by CalFire personnel funded through CSA 40, provide the only fire protection services by full time staff on the Sonoma County coast.

In addition, various levels of certification and safety standards are now required for many activities performed by volunteer staff. It is becoming increasingly difficult to maintain sophisticated emergency medical training and first responder training for hazardous materials, terrorism, and natural disasters. The need to comply with Federal and State mandated standards for personal safety equipment and training is also straining the system. These additional requirements further increase the amount of time

volunteer staff must spend in training and the necessary level of their commitment. Volunteers, usually younger workers, often have difficulty finding affordable housing and may have to travel out of the immediate area for employment. These factors contribute to the difficulty volunteer fire companies have in recruiting and retaining volunteers.

Demand for increased fire suppression and emergency medical services will not be generated by housing, population, or job growth alone. Increases in tourism, increases in level of service expectations, and changes in the population mix will also affect demand.

The Department of Fire and Emergency Services projects that the most pressing and costly needs involve staffing levels. It anticipates a shift from volunteer supported services to an even greater reliance on paid personnel. This shift will be accompanied by a trend from volunteer companies to formation of special districts.

The primary tasks with regard to fire services planning are to ensure that needed organizational changes occur in a timely and cost effective manner, and to secure adequate revenue sources. Emergency medical services should also be evaluated, since the growth in medical calls over the first half of the decade has consistently outpaced fire emergency calls.

On the Sonoma County coast all communities are served by volunteer fire departments with the exception of Duncans Mills and Jenner, served by the Monte Rio Fire Protection District; Bodega Bay, served by the Bodega Bay Fire Protection District; and The Sea Ranch and Annapolis, served by the North Coast Fire Protection District (established in April 2016) The Fort Ross and Bodega Volunteer Fire Departments are funded by CSA 40. Timber Cove is a special tax district, not part of CSA 40. **Figures C-PF-2a to C-PF-2c** show the Fire Protection Districts on the coast.

Structural fire protection on the coast has general inadequacies common to many rural areas. The Sea Ranch, Timber Cove, and Bodega Bay are the only areas with adequate water supply and water pressure for firefighting. Most departments lack paid staff and up-to-date firefighting equipment. The average age of fire apparatus is 26 years. Most of the fire stations are in need of maintenance and repair, and some need to be replaced. Fire protection response areas tend to be large, with limited road access. These factors combined with volunteer fire departments make for relatively long response times.

Increases in coastal development are not likely to bring about substantial changes in the organization of coastal fire departments because the costs for fire protection are too

high. Only The Sea Ranch and Bodega Bay are expected to reach levels of development where minimal paid staffing levels would be possible. However, increased development and public access to the Sonoma Coast will increase fire risk and demand for emergency medical services. The aging demographics of coastal communities will make the recruitment of young volunteers problematic. Increasingly limited funds at Federal, State, and local levels make acquisition of fire equipment difficult, especially for departments that have relatively low call volume.

6.2 Emergency Medical Services

The Sonoma County coast has limited medical services. It is difficult to attract and keep physicians since rural area physicians face longer hours and lower pay than their urban counterparts. Emergency medical and other support facilities are also lacking.

The Coast First Responders Group has been established to serve the majority of the Sonoma Coast. Participation spans from fire agencies in Bodega Bay to The Sea Ranch, and includes State and county parks departments, Sonoma County Sheriff, California Highway Patrol, Redwood Empire Dispatch Communications Authority (REDCOM), CalFire, and the U.S. Coast Guard. This group regularly meets to discuss interoperability, review current multi-agency events, and plan multi-agency training. This group has also written a Coastal Incident Response Plan.

Redwood Coast Medical Services (RCMS) provides primary and preventative medical services and urgent care (available at all times) to the northern California Coast from Timber Cove north to Irish Beach in Mendocino County. Specialty medical services provided by RCMS include cardiology, ophthalmology, orthopedics, podiatry, and acupuncture, complete dental services, hospice/respite services, and counseling. Facilities consist of a main medical clinic in Gualala, dental and selected medical clinic in Point Arena, and counseling and outreach services at another clinic in Gualala. RCMS used to operate the only clinic on the Sonoma County coast until it moved from Stewarts Point to Gualala.

The Coast Life Support District (CLSD) is a special tax district charged with providing basic and advanced life support ambulance services over 270 square miles (about 47,000 acres) in Sonoma and Mendocino Counties. The CLSD service area in Sonoma County covers the coast from the north County line to an area just south of the Fort Ross Store, including Annapolis and the surrounding area; the Kashia Indian Reservation and surrounding area; and the communities of The Sea Ranch, Annapolis, Stewarts Point, Timber Cove, and Fort Ross. CLSD responds to calls other than those for medical aid, including fires, vehicle accidents, hazardous materials incidents, and

requests from law enforcement officers. Partners with RCMS (discussed above) and two medical helicopter providers (Sonoma County - REACH, Marin County - CalStar), the CLSD headquarters is located next to the RCMS main medical clinic and South Coast Fire Station in Gualala. Ambulance service from the Russian River Fire Protection District in Guerneville supplements the ambulance services provided by CLSD. Emergency patients may be transported to RCMS for treatment before subsequent transport to a Sebastopol or Santa Rosa hospital via a CLSD ambulance or a medical helicopter. In Sebastopol, Sonoma West Medical Center, formerly Palm Drive Hospital, is expected to reopen in November 2016 following a final State inspection. The County Sheriff's helicopter is also available to transport emergency patients.

The South Coast does not have any health clinics, mainly because it is less isolated from inland medical facilities compared to the North Coast. A health clinic would provide quicker and easier access to primary health care, including emergency first aid, for South Coast residents and visitors. Continued urban growth along the South Coast will only increase demand for health services. Funding is the major problem with establishing a health clinic on the South Coast.

Bodega Bay is a potential location for a South Coast health clinic. If the community of Bodega Bay cannot support a health clinic, minimal services may be provided on a part-time basis by County health outreach workers, but this arrangement would depend on future funding levels of the County Department of Health Services.

The Bodega Bay Volunteer Fire Department and Bodega Bay Area Rescue, a volunteer ambulance company, merged in 1984 to form the Bodega Bay Fire Protection District. The District provides emergency medical and advanced life support ambulance service to the South Coast, from the Russian River south to Tomales Bay and Dillon Beach in Marin County. The District's 24-hour paid staff of emergency medical technicians and paramedics is supplemented with volunteers. Ambulance service from Sonoma Life Support, based in Sebastopol, supplements the ambulance services provided by the District. A County Sheriff's Department helicopter may be dispatched for quick transport of emergency patients to a hospital in Santa Rosa.

Goal C-PF-5: **Ensure that adequate fire protection and emergency medical services are provided to meet the future needs of Coastal Zone residents and visitors.**

Objective C-PF-5.1: Improve fire protection services to the Sonoma County coast.

Objective C-PF-5.2: Promote cooperation among fire protection and emergency medical service agencies in the area of public education and

awareness, especially in those areas isolated from emergency service providers either by distance or topography.

Objective C-PF-5.3: Encourage more effective use of existing fire protection and emergency medical services by emphasizing an integrated response system on the Sonoma County coast.

Objective C-PF-5.4: Improve health, emergency medical, and other medical services to the Sonoma County coast, particularly to the South Coast.

The following policies shall be used to achieve these objectives:

Policy C-PF-5a: Emergency Services shall review and comment on any proposed changes in the boundaries of areas of State and local responsibility for wildland fire protection, and the service boundaries of local Fire Protection Districts and volunteer fire companies. **(GP2020)**

Policy C-PF-5b: Prior to project approval, require written certification from the applicable fire service agency (e.g., County DES) that the project meets or exceeds current fire regulations and that fire protection and related services customarily provided to comparable uses are adequate and available or will be available prior to occupancy for projects within the service area. **(GP2020 Revised)**

Policy C-PF-5c: Support establishment of a health clinic in Bodega Bay or another location on the southern portion of the Sonoma County coast. **(Existing LCP Revised)**

Policy C-PF-5d: Continue to coordinate fire protection services and planning with all other related agencies.

7. LAW ENFORCEMENT SERVICES POLICY

Law enforcement on the Sonoma County coast is the responsibility of the California Highway Patrol, Sonoma County Sheriff's Department, and State and County Park Rangers. The Sea Ranch maintains a private security force.

The coast is a large, sparsely populated area with limited access roads and rugged terrain. As such, provision of law enforcement services is necessarily limited. Resident Sheriff deputies are stationed at The Sea Ranch, Fort Ross, Timber Cove, and Bodega Bay. They investigate criminal complaints and respond to service calls, including search and rescue calls. Each deputy is on call five days a week and deputies alternate days off. Manpower is very limited.

The California Highway Patrol (CHP) has no regular beat along the Sonoma Coast. The traffic levels and accident rates are too low to merit one, and the region is too remote

for efficient deployment of manpower. The CHP responds to accidents or other service calls on coastal roadways, but response times vary depending on where officers are and what else is happening at the time the call comes in.

State and County Park Rangers enforce park regulations which include vehicle parking, camping, and park use restrictions. They also render assistance and respond to emergencies on State and County park property.

Park Ranger staffing at State and County Parks on the Sonoma County coast in 2015 was as follows:

- (1) Bodega Bay Area Regional Parks (Doran and Westside Parks): 5 rangers
- (2) North Coast Regional Parks (Stillwater Cove and Gualala Point): 2 rangers
- (3) Salt Point State Park and Kruse Rhododendron Preserve, and Fort Ross State Historic Park (State): 3 rangers
- (4) Sonoma Coast State Beach, Armstrong State Reserve, and Austin Creek State Recreation Area (State): 7 rangers

New development on the coast will increase pressure for additional law enforcement protection by the County Sheriff and CHP. Residents in rural subdivisions often do not realize that urban emergency response times cannot be provided at isolated locations in rural areas, and become dissatisfied with the service levels. Even existing service levels cannot be maintained with an increase in service calls unless additional manpower is available.

Parking management is another law enforcement responsibility which may increase as a result of implementation of this Local Coastal Plan. Policies call for closing small or poorly located parking turnouts, prohibiting parallel parking along parts of State Highway 1, and enforcing parking restrictions. Only park rangers presently enforce parking restrictions, and their responsibility is limited to park lands. On peak weekends when park rangers are busiest with service calls and parking problems are greatest, parking enforcement receives low priority and little attention. The Sheriff and CHP currently do not enforce parking, since there is only one restricted parking area along Highway 1.

Acquisition and development of additional park land and public accessways, mandated by the California Coastal Act, will require increases in park rangers and other staff to maintain and operate them. The expected growth in park use will also cause an increase in ranger responsibilities. Law enforcement agencies are concerned about these expected increases in responsibilities. However, they have little recourse other than to request additional staff when service levels deteriorate. One option would be to

pursue State funds for law enforcement services needed to patrol the new park land and public accessways.

Goal C-PF-6: **Ensure that law enforcement services are provided to meet the future needs of Coastal Zone residents and visitors.**

Objective C-PF-6.1: Improve law enforcement services to the Sonoma County coast, particularly patrolling State Highway 1, parks, and public accessways.

The following policies shall be used to achieve these objectives:

Policy C-PF-6a: Encourage an increase in traffic patrol of State Highway 1 through use of a CHP helicopter and any other feasible means. **(Existing LCP Revised)**

8. SOLID WASTE MANAGEMENT SERVICES POLICY

The Sonoma County Waste Management Agency (SCWMA) is the joint powers authority of the nine incorporated cities (Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Santa Rosa, Sebastopol, Sonoma, and Windsor) and the County of Sonoma, and this agency manages waste diversion throughout the County per AB 939. Along with standard waste diversion, the programs that SCWMA provides include household hazardous waste removal, composting, wood waste recycling, planning, and education.

Along the Sonoma County coast north of the Russian River/Jenner, solid waste collected by a licensed hauler is delivered to the Annapolis Transfer Station, from which it is transferred to the Central Disposal Site in Petaluma. Solid waste hauled by self-haul customers could be taken to the Annapolis Transfer Station or the Guerneville Transfer Station, from which it is transferred to the Central Disposal Site. On the coast south of the Russian River, solid waste collected by a licensed hauler is delivered to the Guerneville Transfer Station or directly to the Central Disposal Site. Solid waste hauled by self-haul customers would likely be taken to the Guerneville Transfer Station and could be taken directly to the Central Disposal Site. In 2013, the County entered into a long-term (effective April 1, 2015 for a 20-year term) Master Operations Agreement with Republic Services of Sonoma County, Inc. for operations of the Central Disposal Site and the County's solid waste transfer stations (Sonoma, Healdsburg, Guerneville, and Annapolis).

State law requires cities and/or counties to prepare a Countywide Integrated Waste Management Plan (CoIWMP) to identify and reserve sites for solid waste facilities, and ensure that land uses adjacent to or near solid waste facilities are compatible with

those facilities. Sonoma County, in cooperation with the cities in the County, prepared a CoIWMP in 1994. The most recent amendment to the CoIWMP was approved by the California Department of Resources Recycling and Recovery in May 2010.

The CoIWMP is the principal planning document for solid waste management in the County. Solid waste management facilities located in unincorporated areas, including landfills and transfer stations, are designated in the Land Use Element. Issues pertaining to solid waste management addressed in the CoIWMP include:

- (1) The need to temporarily close the Central Landfill and transition from a landfill based system to an outhaul based system (truck and/or rail transport) due to the expense and regulatory uncertainty associated with expanding the Central Landfill and securing flow-control agreements from the cities.
- (2) The need to accommodate the sludge disposal needs of wastewater treatment facilities serving both cities and unincorporated areas; and other types of waste matter, including compostable yard waste and organic matter, recyclable inorganic products (plastic, glass, metal, etc.) and non-compostable organic matter, by treating them as a resource rather than a waste product.
- (3) Reduction of the quantity of waste deposited in landfills by 50% or greater after 2000, based on waste generation rates of 1990.

The CoIWMP contains goals, policies, and short, medium, and long-range objectives, together with measures designed to guide solid waste management and disposal actions of the County and other applicable agencies. The Public Facilities and Services Element is intended to complement the adopted policies of the CoIWMP and any subsequent amendments thereto.

Goal C-PF-7: **Ensure that solid waste management facilities are sited to minimize adverse impacts on the Coastal Zone environment.**

Objective C-PF-7.1: Locate solid waste management facilities to minimize adverse effects on natural and scenic resources.

The following policies, in addition to those in the Open Space and Resource Conservation Element, shall be used to achieve this objective:

Policy C-PF-7a: The application of biosolids generated in Sonoma County to agricultural lands in the County shall be allowed if it meets all of the following criteria. In the event that one or more of the criteria are not met, a Local Coastal Plan amendment shall be required.

- (1) The project's primary purpose is to enhance agricultural use. The rate of biosolid application shall be designed to enhance existing agricultural operations or designed in conjunction with a detailed management plan for proposed agricultural use.
- (2) The rate of biosolid application shall not result in any future limitations on the potential agricultural use of the area of application.
- (3) The project shall be subject to the approval of the applicable Regional Water Quality Control Board.
- (4) A use permit and, if necessary, a solid waste facility permit, shall be obtained.
- (5) A permit shall be obtained from the local solid waste enforcement agency.
- (6) The biosolids to be applied to agricultural lands shall be limited to those originating from an approved Sonoma County biosolids source.
- (7) The project shall include provisions for periodic review and evaluations of long-term impacts on soils, water, and agricultural production.
- (8) The site for biosolids application does not contain and is at least 100 feet from wetlands and other ESHAs.

In the event that the biosolids generated in the County is inadequate to address the agricultural demand for biosolids, the County may consider site specific Local Coastal Plan text amendments for the application of biosolids generated outside of the County, provided that the above criteria 1-5 and 7-8 are met and that:

- (1) The applicant can satisfy local public health officials that the method of production and content of the biosolids will not be detrimental to public health.
- (2) The applicant demonstrates that traffic and other impacts of the proposed project are mitigated to the maximum extent feasible.
- (3) The applicant demonstrates that there are no alternative sources of biosolids in the County. **(GP2020)**

9. PUBLIC UTILITIES POLICY

The Land Use Element designates existing public utilities as Public/Quasi-Public. Public utilities such as electricity, natural gas, broadband, and telephone services, require transmission and maintenance facilities that may affect natural and scenic resources or neighborhood character. The need for expanded and improved telecommunications services such as fiber and wireless broadband on the Sonoma County coast has been identified by residents and businesses.

In October 2006, Governor Schwarzenegger signed Executive Order S-23-06 to streamline approvals for building broadband networks; ensure all government agencies are using the best technologies to serve the people; and create a broadband task force that lets experts from government and business work together to identify and eliminate obstacles to making broadband internet access ubiquitous in the State. One of the issues raised at the Local Coastal Plan public workshops at The Sea Ranch and Jenner in May and June 2013 is the need for expansion and improvement of telecommunications services, including wireless broadband, on the Sonoma and Mendocino county coasts to provide access to emergency, medical, and educational services; improve the economy; and close the gap in the fiber-optic cable between AT&T on the North Coast and Verizon on the South Coast. In June 2015 The Sea Ranch filed an application for a Coastal Permit and Use Permit to build 59.8 miles of fiber optic telecommunications network next to roads and in trails to serve 2,280 lots in its subdivision units.

Expansion and improvement of broadband on the Sonoma County coast would close the “digital divide” by providing equality of opportunity for rural residents and businesses to have the same information and resources provided online to urban residents; boost the coast economy by allowing large, small, and home-based businesses to have a more level playing field from which to compete for a fair share of the market; increase opportunities for education, training, and employment of residents; and save lives and improve healthcare by decreasing emergency response times and increasing opportunities for telemedicine (the remote diagnosis and treatment of patients by means of telecommunications technology).

The “Economic Development Strategy and Jobs Plan - November 2011” developed by the Sonoma County Economic Development Board includes “Strategic Objective 6 – Facilitate Broadband Development in Rural Parts of the County”. The project and associated action steps are described in the “Economic Development Strategy and Jobs Plan” as follows:

Access to broadband is becoming increasingly important to rural areas of the county, particularly for businesses such as hospitality, wine, agriculture, food processing and professional services. State funding has become available for consortia to participate in consortiums to develop three year plans for broadband deployment (training, promotion, and adoption) and there soon may be funds available for “middle mile” and “last mile” deployment. The County has joined with the North Bay North Coast Broadband Consortium (NBNCBC) in their planning efforts, and should position itself to seek funds for middle and last mile broadband deployment locally, as well as be prepared for funds that may arise for further service. Extending broadband services into unserved and underserved areas would greatly benefit the current population of tourist destination wineries, creative

professionals, and others, and provide opportunities as infrastructure needed for economic development is made available.

- a. Support efforts of the Economic Development Board through its Access Sonoma Broadband division to coordinate countywide broadband planning and broadband deployment, grant application development, and outreach.*
- b. Support and facilitate the preparation of data and partnerships for grant applications and success, as further partnerships and funding opportunities are made available.*

10. YOUTH AND FAMILY SERVICES POLICY

The traditional focus of the Local Coastal Plan has been on land use, housing, open space, and other land use related matters. While youth, family, and other social services are not typically considered in this context, many local jurisdictions are beginning to acknowledge the valuable contribution that these services make to a community's quality of life. Issues such as housing, recreation, and child care have a direct link to land use and applicable policies have been developed and are presented in this section. Other issues, such as neighborhood security, youth participation in government, child abuse, drug and alcohol prevention, etc. are not as directly related to land use but, nonetheless, Sonoma County recognizes the importance of these issues and will continue to solicit Federal and State funding to address a full range of health and human service programs designed to create an environment where the County's children, youth and families, senior citizens, and persons with disabilities live in secure and healthy communities. The County would continue to support programs intended to address such significant issues as the prevention of child abuse, youth violence, and drug and alcohol use by minors; as well as those programs which enhance diversity, promote parent education and support services, affordable child care, youth recreation programs, neighborhood revitalization, school based health services, and programs which provide for the needs of low income seniors and disabled persons.

Goal C-PF-8: **Provide a full range of health and human services to create secure and healthy communities.**

Objective C-PF-8.1: Promote living conditions in homes and neighborhoods that support safety and security for residents of unincorporated areas.

Objective C-PF-8.2: Encourage the development of quality child care facilities, including large and small family child care homes, and public and private daycare centers, in order to provide a wide range of alternatives that meet the diverse needs of children and parents.

Objective C-PF-8.3: Foster a safe living environment that encourages independence, promotes opportunities for socialization, and facilitates the creation of adequate and affordable housing options for seniors and persons with disabilities that consider all levels of care, including independent living, assisted living, board and care, skilled nursing facilities, and day care options.

The following policies shall be used to achieve these objectives:

Policy C-PF-8a: Public spaces shall be designed to reflect the needs of children, youth, families, seniors, and persons with disabilities; and to protect their safety. In designing park and recreational facilities, recognize that accessibility will vary depending on the location and purpose of the facility, consistent with State and Federal guidelines. **(GP2020)**

Policy C-PF-8b: Consider the potential negative impacts of proposed projects involving the selling or serving of alcohol or tobacco products or any other controlled substance of a similar nature. When reviewing new proposals, consider the site's proximity to other such uses and to youth serving facilities, and consider denial of Use Permit applications that would result in negative impacts. **(GP2020)**

Policy C-PF-8c: Encourage and support the availability of sites for community based health services, including school based health services and facilities. **(GP2020)**

Policy C-PF-8d: Encourage and support the availability of sites for alcohol, drug, and mental health treatment; as well as housing for persons receiving such treatment. **(GP2020)**

Policy C-PF-8e: Encourage opportunities for safe physical activity as an important component in the design and development of parks and public spaces. **(GP2020)**

Policy C-PF-8f: Child care facilities shall be allowed in all land use designations and encouraged in underserved areas. **(GP2020)**

Policy C-PF-8g: Child care facilities shall be allowed in new housing or office/industrial developments, and required in large projects where a legal nexus between the new development and the need for childcare can be established. **(GP2020)**

Policy C-PF-8h: Consider the needs of youth in transportation planning. Seek youth participation in such decisions. **(GP2020)**

Policy C-PF-8i: New housing and public facilities which provide youth, family, and senior services shall be sited near transit stops when feasible. **(GP2020)**

Policy C-PF-8j: Consider the needs and limitations of senior citizens and persons with disabilities when planning for public transit routes and equipment. **(GP2020)**

Policy C-PF-8k: Consistent with the Land Use Element, provide seniors and persons with disabilities with access to affordable housing by continuing to assist in the planning and construction of such housing. **(GP2020)**

11. IMPLEMENTATION PROGRAMS

11.1 Public Facilities and Services Programs

Program C-PF-1: Work with the County Service Areas and Special Districts to provide local parks and recreation, public education, fire and emergency medical, law enforcement, solid waste management, and public utilities facilities and services. **(GP2020)**

Program C-PF-2: Develop and implement programs that include obtaining grants for supporting and assisting communities in upgrading failing OWTs or developing on-site wastewater maintenance and management districts, community leachfields, or community wastewater treatment systems. **(GP2020)**

Program C-PF-3: Consider development of on-site wastewater maintenance and management districts in areas with OWTs problems. **(GP2020)**

Program C-PF-4: Where there is an unmet need for local park facilities in an area, and County Regional Parks does not have plans for facilities in the area, encourage the existing or formation of new County Service Areas or other Special Districts to meet the need, if economically feasible. **(GP2020)**

Program C-PF-5: Establish an adequate and reliable source of funding for fire protection agencies that would provide for adequate staffing, adequate volunteer support, and purchasing and maintaining modern fire equipment. Consider new or amended impact fees for new subdivisions or development as a means of funding improved fire protection services and facilities in the Coastal Zone. **(GP2020 Revised)**

Program C-PF-6: Support establishment of a regional fire protection district that provides adequate and reliable sources of funding for fire protection services. **(New)**

Program C-PF-7: Support the work of the County Fire Services Advisory Committee and its rural firefighting network assessment. Prepare a Fire Services Master Plan for urban and rural areas in cooperation with the State and other fire service agencies. The Master Plan shall be incorporated into the Local Coastal Plan. The minimum contents necessary for an adequate Master Plan are:

- (1) A statement of objectives, policies, and programs.
- (2) A forecast of growth.
- (3) Projected fire protection and emergency medical service needs.
- (4) A level of service assessment.
- (5) A discussion of fire regulations and policies for “defensible space” consistent with California Coastal Act sections applicable to Environmentally Sensitive Habitat Areas (ESHAs). **(GP2020)**

Program C-PF-8: Consider streamlining zoning regulations, for which a Local Coastal Plan Amendment would be required, and reducing fees for large family child care homes and day care centers. Cooperate with the Sonoma County Child Care Planning Council and non-governmental organizations in creating a uniform and simplified review process for childcare facilities. **(GP2020)**

Program C-PF-9: Consider installing charging stations for, electric, or other alternative fuel vehicles at public facilities and other visitor serving uses. **(New)**

Program C-PF-10: Consider the following and develop improvement plans where appropriate:

- (1) A community leachfield at Duncans Mills.
- (2) Relocation of the OWTs at Bridgehaven and Rancho del Paradiso.
- (3) A community wastewater collection and treatment system or a package wastewater treatment plant at Jenner.
- (4) A community wastewater collection and treatment system or a package wastewater treatment plant at Carmet.

At Salmon Creek and Wrights Beach: construction of a package wastewater treatment plant, relocation of the OWTs away from houses, or construction of a community leachfield. **(New)**

11.2 Other Initiatives

Other Initiative C-PF-1: Consider preparation on a regular basis of a total water supply and use budget for the Sonoma County Coastal Zone to aid in land use planning and decision-making. Encourage Coastal Zone water service providers to prepare individual water supply and use budgets on a regular basis to provide the necessary information for the total water supply and use budget. **(New)**

Other Initiative C-PF-2: Work with Community Service Districts, Park & Recreation Districts, and School Districts to meet local community park needs. **(GP2020)**

Other Initiative C-PF-3: Assist school districts in estimating the amount, rate, and location of projected population growth in their attendance areas. **(GP2020)**

Other Initiative C-PF-4: Promote State funding of costs for patrolling new parks and public accessways which are mandated by the California Coastal Act. **(Existing LCP Revised)**

Other Initiative C-PF-5: Encourage the providers of telecommunication services, including broadband, to expand and improve services to the Sonoma County coast, including closure of the gap in existing fiber-optic cable between the north and south coast. **(New)**

Other Initiative C-PF-6: Support the Sonoma County Economic Development Board and the Broadband Alliance of Mendocino County in their efforts to expand and improve wireless broadband services on the Sonoma and Mendocino County coasts. **(New)**

Other Initiative C-PF-7: Encourage schools to offer recreation programs and before-school and after-school care whenever possible. **(GP2020)**

Other Initiative C-PF-8: Collaborate with stakeholders to establish long-term goals for improving the living conditions of children, youth, families, senior citizens, and persons with disabilities; and continue to monitor available data regarding their status. **(GP2020)**

Other Initiative C-PF-9: Work with school districts to provide safe walking and bicycle paths around schools and neighborhoods. **(GP2020)**

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PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

NOISE ELEMENT September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

NOISE ELEMENT

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NOISE ELEMENT

1. INTRODUCTION

1.1 Purpose

The Noise Element of the Local Coastal Plan is a planning document that provides a policy framework for addressing potential noise impacts during the planning process. The Noise Element is intended to provide ways to reduce existing and future noise conflicts. It includes policies and measures to achieve noise compatibility between land uses.

In accordance with State Law and guidelines (the California Coastal Act does not address Noise), the Noise Element identifies noise sources and noise sensitive land uses. It quantifies noise levels using noise exposure contours for current and projected conditions in the Sonoma County Coastal Zone. Existing noise Levels are measured as Community Noise Equivalent Level (CNEL) or the Day-Night Average Level (Ldn), which are measurements of total noise exposure at a given location on an average day. This noise exposure information serves as a basis for achieving land use compatibility within each community and provides baseline levels and noise source identification for use in a noise control ordinance or during the review of proposed development projects.

1.2 Relationship to Other Elements

The Noise Element is related to the Land Use, Circulation and Transit, Public Access, and Open Space and Resource Conservation Elements of the Local Coastal Plan. Recognition of the interrelationship of noise and these Elements is necessary to prepare an integrated Local Coastal Plan. The relationship between these Elements is briefly discussed below:

1.2.1 Land Use Element

An objective of the Noise Element is to provide noise exposure information for use in the Land Use Element. When integrated with the Noise Element, the Land Use Element will show acceptable land uses in relation to existing and projected noise levels.

1.2.2 Circulation and Transit Element

The circulation system, which is a major source of noise, must be correlated with the Land Use Element. This is especially true for roadways which carry significant numbers of trucks. Noise exposure will thus be a decisive factor in the location and design of new transportation facilities, and in the mitigation of noise produced by existing facilities.

1.2.3 Open Space and Resource Conservation and Public Access Elements

Excessive noise adversely affects the enjoyment of recreational pursuits in designated open space areas; particularly in areas where quiet is a valued part of the recreational experience. Thus, noise exposure should be considered in planning for this kind of open space use. Conversely, open space can be used to buffer noise-sensitive uses from noise sources by providing setbacks and visual screening.

1.3 Scope and Organization

The Noise Element is organized into three sections: Introduction, Overview of the existing and future noise environment, and Noise issues, policies, and standards. Programs needed to implement proposed policies are also identified. In addition, the Element calls out ongoing or potential future County initiatives, referred to as “Other Initiatives”, that support noise management within the planning area.

Noise exposure information should be included in a Noise Element for the following major noise sources in the Coastal Zone:

- (1) Highways and freeways
- (2) Primary arterials and major local streets
- (3) Local industrial facilities
- (4) Recreational, entertainment, and special events
- (5) Other stationary sources

Noise-sensitive uses include the following:

- (1) Residences
- (2) Schools
- (3) Hospitals, nursing homes
- (4) Churches, libraries
- (5) Long-term medical or mental health care facilities
- (6) Office building interiors
- (7) Other uses deemed noise sensitive by the local jurisdiction

A Noise Element Technical Reference Document, on file at Permit Sonoma, describes in greater detail the effects of noise on people and techniques for noise analysis and control. It also includes data from the community noise survey and highway noise

evaluation. It is a reference for use by Sonoma County during the review of documents or proposals which refer to the measurement and effects of noise.

2. NOISE BACKGROUND

2.1 Methods of Noise Analysis

2.1.1 Noise and Its Effects on People

Noise is often described as unwanted sound, and thus is a subjective reaction to the physical phenomenon of sound. Sound is variations in air pressure that the ear can detect. Noise has often been cited as a health problem because it inhibits general well-being and contributes to undue stress and annoyance. Noise interferes with sleep, speech, recreation, and tasks demanding concentration or coordination. The result is an increase in public annoyance with the noise source and a decrease in environmental quality. The various noise exposure limits of different state and federal agencies range from 75 to 90 dB to protect hearing over the long-term. However, the United States Environmental Protection Agency recommends a level of 55 dB L_{dn} to protect against non-auditory health effects such as hypertension, cardiovascular disease, and nervous disorders.

In very quiet environments, virtually any change in local activities may cause an increase in noise levels and a loss of peace and quiet. Such increases may be considered significant by residents in these areas, even if the measured increase is small.

2.1.2 Measuring Sound Levels

Decibel (dB). The most common unit of sound measurement is the decibel, abbreviated as dB. The threshold of hearing is considered to be 0 dB, and the range of sounds in normal human experience is 0 to 140 dB.

Weighting Scales (dBA). Sound waves travel at different frequencies. Because the human ear is not as sensitive at some frequencies, different sound weighting scales have been developed. The "A" weighting scale is the most commonly used for environmental noise assessment, as it correlates well with human response to noise sources such as aircraft and traffic. To measure low frequency sound levels, such as blasting, the use of a "C" weighting scale may be more appropriate. When an A-weighting scale is used to measure sound pressure levels, the results may be expressed as dBA or dB(A) for clarity.

Typical Sound Levels. Table C-NE-1 shows typical sound levels and relative loudness for various types of noise environments.

Table C-NE-1: Examples of A-Weighted Sound Levels and Relative Loudness

Sound	Sound Level (dBA)	Relative Loudness (approx.)	Relative Sound Energy
Jet aircraft, 100 feet	130	128	10000000
Rock music with amplifier	120	64	1000000
Thunder, snowmobile (operator)	110	32	100000
Boiler shop, power mower	100	16	10000
Orchestral crescendo at 25 feet, noisy kitchen	90	8	1000
Busy street	80	4	100
Interior of department store	70	2	10
Ordinary conversation, 3 feet away	60	1	1
Quiet automobile at low speed	50	1/2	0.1
Average office	40	1/4	0.01
City residence	30	1/8	0.001
Quiet country residence	20	1/16	0.0001
Rustle of leaves	10	1/32	0.00001
Threshold of hearing	0	1/64	0
SOURCE: U.S. Department of Housing and Urban Development, "Aircraft Noise Impact -- Planning Guidelines for Local Agencies," 1972.			

Ambient Noise Levels. The ambient (or background or pre-project) noise level is defined as the noise from all sources near and far, and usually refers to the noise level that is present before a noise source being studied is introduced.

Sound Average Level Over Time (L_{eq} , CNEL, and LDN). L_{eq} represents the average or equivalent measured energy from all noise events observed or measured during a specified interval of time. Noise exposure contours or noise contours are lines drawn about a noise source representing constant levels of noise energy or exposure. The CNEL and LDN descriptors are variations of the L_{eq} that represent the average noise level for a 24-hour day after including a 10 dB penalty for noise levels occurring at night between the hours of 10:00 p.m. and 7:00 a.m. The CNEL descriptor additionally includes a penalty of 5 dB for noise levels occurring during the evening hours of 7:00 p.m. and 10:00 p.m. The CNEL descriptor is required when preparing noise exposure maps for airports within the State of California. The L_{dn} descriptor has been used in this Noise Element to quantify noise from transportation noise sources. The

CNEL and L_{dn} descriptors are generally considered to be equivalent to each other for most community noise environments within 1.0 dB.

Sound Level Exceeded During Specified Percentage of Time. (L_{10} , L_{50} , L_{90} , L_{MIN} , L_{MAX} , etc.). If a noise source operates only a few hours a day, averaging the noise over 24 hours may under-estimate its nuisance potential (example: live amplified music, drag races). Because many industrial or stationary noise sources operate sporadically, the hourly L_{50} and L_{max} are more useful for predicting noise conflicts from such sources than is the L_{dn} . The L_{50} represents the median noise level or noise level exceeded 50% of the time. The maximum (L_{max}) noise level is the highest level observed. To describe less extreme variations in sound levels, other statistical descriptors may be used, such as the L_{10} and L_{50} and L_{90} .

2.1.3 Community Noise Survey

A community noise survey was conducted to document noise exposure in representative areas of the County containing noise-sensitive land uses. The following noise-sensitive land uses were identified for the purpose of this survey:

- (1) All residential uses
- (2) Schools
- (3) Long-term care medical facilities such as hospitals and nursing homes
- (4) Places of public worship
- (5) Libraries

Noise monitoring sites were selected to be representative of typical conditions where such uses are located. Short-term community noise monitoring sites were located at The Sea Ranch, Timber Cove, Fort Ross, Jenner, and Bodega Bay. The community noise measurements were conducted in July 2002, and indicate that typical cumulative noise levels in noise-sensitive areas range from 45 to 55 dB L_{dn} . The community noise survey results indicated that median (L_{50}) noise level values in most locations are relatively low, especially at night. The relatively low noise levels are typical of small communities and rural areas. In more developed areas, increased local traffic will result in higher noise levels, in the range of 55 to 65 dB L_{dn} . Noise level data collected during the community noise survey are summarized in the *Noise Element Technical Reference Document*.

2.2 Noise Sources

2.2.1 Overview of Noise Sources

The noise exposure information developed during preparation of this Noise Element does not include all conceivable sources of noise in the Coastal Zone, but rather focuses on the existing sources of noise which have been identified by the County as being potentially significant. As the policies of this Noise Element are applied in the future, it is likely that other potentially significant sources will be identified.

The following potentially significant sources of community noise in the Coastal Zone are addressed in this Noise Element:

- (1) Traffic on State highways and major County roads
- (2) Heavy commercial and industrial activities (i.e., Commercial Fishing)
- (3) Mineral extraction
- (4) Solid waste landfills and transfer stations
- (5) Concerts, special events, and other activities generating amplified outdoor sound

2.2.2 Highways and Roadways

The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model was used to develop L_{dn} contours for roadways in Sonoma County. The FHWA Model is the analytical method currently favored by most state and local agencies. Existing traffic volume data were obtained from Caltrans and the Sonoma County Department of Transportation and Public Works. Truck volume estimates were based on the data provided by Caltrans and observations of relative truck mix on County roads. Future traffic volumes are from the Circulation and Transit Element, and were calculated for 2020 traffic volumes.

The most significantly noise-impacted highways and roadways are Highway 1 and Highway 116 based on future 2020 traffic volumes. In the Coastal Zone, from north to south, segments of State Route 116, State Route 1, and Petaluma-Valley Ford Road are noise impacted:

- (1) *State Route 116*: from its intersection with State Route 1 to the boundary of the Coastal Zone north of Duncans Mills
- (2) *State Route 1*: south of Jenner to its intersection with Petaluma-Valley Ford Road
- (3) *Petaluma-Valley Ford Road*: from its intersection with State Route 1 to the eastern boundary of the Coastal Zone

The *Noise Element Technical Reference Document*, on file with Permit Sonoma, lists the distances from roadway centerlines to the existing and future 60 and 65 dB L_{dn} contours for State highways and County roads having average daily traffic volumes (ADT) greater than 5,000 vehicles per day.

Noise contours do not account for shielding caused by local buildings or topographical features and should therefore be considered as worst case estimates of noise exposure along roadways.

2.2.3 Heavy Commercial and Commercial Fishing Activities

The production of noise is an inherent part of many industrial, commercial, commercial fishing and agricultural processes, even when the best available noise control technology is applied. In the Coastal Zone limited industrial uses are only allowed within the Commercial Fishing district. Commercial Fishing uses include but are not limited to fish processing, and boat and equipment repair and storage. Noise production within industrial or commercial facilities is controlled indirectly by federal and state employee health and safety regulations (OSHA and Cal-OSHA), but exterior noise emissions from such operations have the potential to exceed locally acceptable standards at nearby noise-sensitive land uses.

Noise exposure information for representative industrial noise sources is contained in the *Noise Element Technical Reference Document*. Predicted distances to the 45 dBA and 50 dBA hourly L_{50} noise contours were prepared for representative industrial noise sources in the County where such contours would extend offsite (Table 2-3 of the *Technical Reference Document*). These generalized contours should be used as a screening device to determine when potential noise-related land use conflicts may occur, and when site-specific studies may be required to properly evaluate proposed industrial noise at a given noise-sensitive receiver location.

Wood remanufacturing operations is one example of these representative industrial noise sources. Activities include lumber sawing and heavy truck operations. The approximate distances to the 45 and 50 dB hourly L_{50q} contours were 1,040 feet and 580 feet, respectively, measured from about 150 feet inside the main entry gate.

Marine commercial and industrial operations, allowed with a Use Permit only on land designated and zoned Commercial Fishing, are a representative heavy commercial noise source in the Coastal Zone. Typical activities include boat repair and maintenance, welding and small machinery repair, operation of ice and blower machinery, fish off-loading, gear loading, boat haul-out and hoisting, boat pump-out, and boat launching. While literature on the typical noise levels generated by these activities is not readily

available, noise consultants indicate the noise levels would be similar to those generated by a heavy metal fabrication facility.

Potential new industrial noise sources other than agricultural support uses will be located in the areas designated as commercial on the Land Use Plan. Projects in those locations and in adjacent residential areas will be reviewed for consistency with the performance standards in this Noise Element, including the identification of intermittent noise sources (such as blasting) that may warrant the need for noise analysis using the “C” noise weighting scale.

2.2.4 Mineral Extraction

Mineral resource extraction and processing, which involves the use of noise-producing machinery, is subject to the policies of the 1994 Sonoma County Aggregate Resources Management Plan (ARM Plan) and Sonoma County Code Chapter 26A (Surface Mining), Article IX (Standards for Mining Permits and Operations), Section 26A-09-010(I) (General Standards for Mining Permits and Operations, Noise Control).

Both the ARM Plan and Sonoma County Code Section 26A-09-010(I) state that maximum acceptable noise levels for all aggregate operations shall be as set forth in the Noise Element of the Sonoma County General Plan. The Sonoma County Local Coastal Plan serves as the General Plan for the Coastal Zone. The Sonoma County Code also states that more stringent noise standards may be required as permit conditions when particular local circumstances warrant additional protection of potentially affected areas; and noise control measures may be added to the permit conditions in the future after the permit has been issued.

The Bodega Bay Quarry, former Cheney Gulch Quarry, was located about one and one-quarter miles southwest of the intersection of State Highway 1 and Bodega Highway. It was an active hard rock quarry producing aggregate road base, drain rock, and rip-rap for about 60 years. The Quarry was released and reclaimed in 2012. The ARM Plan identifies a potential quarry expansion area that contains mineral resources to the north, east, and west of the quarry. However, the development or expansion of mining activities in the identified expansion area is considered highly speculative and of uncertain feasibility due to geologic conditions, regulatory constraints, approval requirements, and aggregate transport costs.

Currently no other mineral resource extraction and processing facilities exist in the Coastal Zone. In order to establish a new facility in the Coastal Zone, a Zone Change to add the Mineral Resources (MR) Combining Zoning District, a Use Permit, and environmental review would be required. Any new mineral resource extraction and

processing facility would be considered as a potential noise source as part of environmental review of proposed projects which involve development of nearby noise-sensitive land uses.

Generally, mineral extraction and processing activities include the extraction, processing, and loading of sand, gravel, and other construction aggregates. Noise producing equipment operated at the facility includes conveyors, screeners, rock crushers and loaders, and earth moving equipment. Blasting operations may also occur. Representative measured noise levels were as high as an L_{eq} of 84.8 dB and an L_{max} of 93.8 dB (dominated by a truck exiting the site). Representative approximate distances to the 45 and 50 dB hourly L_{50} contours varied from 1,000 to 5,200 feet and 560 to 2,970 feet, respectively, measured from 100 to 500 feet inside the entry gate.

2.2.5 Solid Waste Disposal

Solid waste operations are regulated by various State laws, including the requirement for each County to have an Integrated Waste Management Plan. The current *County-Wide Integrated Waste Management Plan* (CoIWMP) was adopted on October 15, 2003. The EIR assessed noise impacts to surrounding noise sensitive land uses, and established mitigation measures that are operational conditions for the main landfill and various transfer stations.

Currently there are no solid waste operations in the Coastal Zone. Noise associated with solid waste disposal facilities and transfer stations is produced by the use of engine-powered equipment and by heavy truck movements. During operating hours, landfill operations involve the use of bulldozers, scrapers, compactors, loaders, and watering trucks. At transfer sites, noise is produced by the use of loaders and transient heavy trucks. The access roads for landfills and transfer stations usually experience a greater proportion of heavy truck traffic than otherwise similar roads. As a result, areas containing roads accessing solid waste facilities may experience higher traffic noise levels than other areas of the County.

2.2.6 Cultural Events

Cultural events such as festivals and concerts, may include the use of amplified sound systems. These activities can produce unacceptable noise levels especially during evening hours, and the associated traffic problems may heighten public concern about the noise-producing activity. Given the potential conflicts due to noise associated with events, concerts, and other such activities, noise will continue to be considered in the review process for proposals which allow special events.

3. NOISE POLICY

3.1 Land Use Compatibility and Project Review

Noise level performance standards in **Table C-NE-2** are to be applied as performance standards for noise producing land uses which may affect noise sensitive land uses and new noise sensitive land uses proposed near noise generating land uses.

Infrequent single events such as passage of a train, truck, or airplane may interfere with adjacent uses even though the cumulative noise exposure is within acceptable limits. These events call for a single event noise standard. The potential for sleep disturbance is often the main concern in these cases.

Table C-NE-2: Maximum Allowable Exterior Noise Exposures for Non-Transportation Noise Sources

Hourly Noise Metric ¹ (dBA)	Daytime 7 am to 10 pm)	Nighttime (10 pm to 7 am)
L50 (30 minutes in any hour)	50	45
L25 (15 minutes in any hour)	55	50
L08 (5 minutes in any hour)	60	55
L02 (1 minute in any hour)	65	60
NOTE: ¹ The sound level exceeded n% of the time in any hour. For example, the L50 is the value exceeded 50% of the time or 30 minutes in any hour; this is the median noise level. The L02 is the sound level exceeded 1 minute in any hour.		

GOAL C-NE-1: Protect people from the adverse effects of exposure to excessive noise and to achieve an environment in which people and land uses may function without impairment from noise.

Objective C-NE-1.1: Provide noise exposure information so that noise impacts may be effectively evaluated in land use planning and project review.

Objective C-NE-1.2: Provide noise exposure information so that noise impacts may be effectively evaluated in land use planning and project review.

Objective C-NE-1.3: Protect the present noise environment and prevent intrusion of new noise sources which would substantially alter the noise environment.

Objective C-NE-1.4: Mitigate noise from recreational and visitor-serving uses.

The following policies shall be used to achieve these objectives:

Policy C-NE-1a: Designate areas in the Sonoma County Coastal Zone as noise impacted if they are exposed to existing or projected exterior noise levels exceeding 60 dB Ldn, 60 dB CNEL, or the performance standards of Table C-NE-2. **(GP2020)**

Policy C-NE-1b: Avoid noise sensitive land use development in noise impacted areas unless effective measures are included to reduce noise levels. For noise due to traffic on public roadways, railroads and airports, reduce exterior noise to 60 dB Ldn or less in outdoor activity areas and interior noise levels to 45 dB Ldn or less with windows and doors closed. Where it is not possible to meet this 60 dB Ldn standard using a practical application of the best available noise reduction technology, a maximum level of up to 65 dB Ldn may be allowed but interior noise level shall be maintained so as not to exceed 45 dB Ldn. For uses such as Single Room Occupancy, Work-Live, Mixed Use Projects, and Caretaker Units exterior noise levels above 65 dB Ldn or the Table C-NE-2 standards may be considered if the interior standards of 45 dB Ldn can be met. For schools, libraries, offices, and other similar uses, the interior noise standard shall be 45 dB Leq in the worst case hour when the building is in use. **(GP2020)**

Policy C-NE-1c: Control non-transportation related noise from new projects. The total noise level resulting from new sources shall not exceed the standards in Table C-NE-2 as measured at the exterior property line of any adjacent noise sensitive land use. Limit exceptions to the following:

- (1) If the ambient noise level exceeds the standard in Table C-NE-2, adjust the standard to equal the ambient level, up to a maximum of 5 dBA above the standard, provided that no measurable increase (i.e. +/- 1.5 dBA) shall be allowed.
- (2) Reduce the applicable standards in Table C-NE-2 by five dBA for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises, such as pile drivers and dog barking at kennels.
- (3) Reduce the applicable standards in Table C-NE-2 by 5 decibels if the proposed use exceeds the ambient level by 10 or more decibels.
- (4) For short-term noise sources which are permitted to operate no more than six days per year, such as concerts or race events, the allowable noise exposures shown in Table C-NE-2 may be increased by 5 dB. These events shall be subject to a noise management plan including provisions for maximum noise level limits, noise monitoring, complaint response and allowable hours of operation. The plan shall address potential cumulative noise impacts from all events in the area.
- (5) Noise levels may be measured at the location of the outdoor activity area of the noise-sensitive land use, instead of the exterior property line of the adjacent noise-sensitive land use where:

- (a) The property on which the noise sensitive use is located has already been substantially developed pursuant to its existing zoning, and
- (b) There is available open land on those noise-sensitive lands for noise attenuation.

This exception may not be used on vacant properties which are zoned to allow noise-sensitive uses. **(GP2020)**

Policy C-NE-1d: Require an acoustical analysis prior to approval of any development involving a potentially significant new noise source or a noise sensitive land use in a noise impacted area. The analysis shall:

- (1) Be the responsibility of the applicant.
- (2) Be prepared by a qualified acoustical consultant.
- (3) Include noise measurements adequate to describe local conditions.
- (4) Include estimated noise levels in terms of Ldn and/or the standards of Table C-NE-2 for existing and projected future (20 years hence) conditions, based on accepted engineering data and practices, with a comparison made to the adopted policies of the Noise Element. Where low frequency noise (example: blasting) would be generated, include assessment of noise levels and vibration using the most appropriate measuring technique to adequately characterize the impact.
- (5) Recommend measures to achieve compliance with the Noise Element. Where the noise source consists of intermittent single events, address the effects of maximum noise levels on sleep disturbance.
- (6) Include estimates of noise exposure after these measures have been implemented.
- (7) Be reviewed by the Permit Sonoma and found to be in compliance with the Permit Sonoma guidelines for the preparation of acoustical analyses. **(GP2020)**

Policy C-NE-1e: Continue to follow building permit procedures to ensure that requirements based on the acoustical analysis are implemented. **(GP2020)**

Policy C-NE-1f: Require development projects to include noise mitigation measures as necessary to maintain noise levels compatible with activities planned for the project site and vicinity. **(GP2020)**

Policy C-NE-1g: County equipment and vehicles shall comply with adopted noise level performance standards consistent with the best available noise reduction technology. **(GP2020)**

3.2 Transportation Noise

Transportation sources are by far the most significant sources of environmental noise in Sonoma County. They include vehicular traffic, especially trucks, rail operations, and aircraft overflights in the approach areas to airports. In the Coastal Zone State Highway 1 and The Sea Ranch Airport are sources of noise. An important part of planning for a healthful environment is the avoidance of unnecessary transportation noise. The Circulation and Transit Element includes policies intended to reduce traffic congestion and keep traffic flowing smoothly, thereby helping lower expected future noise levels.

GOAL C-NE-2: **Confine the noise impacts from transportation facilities to the smallest feasible land areas and to assure that any development therein be compatible with the level of noise exposure.**

Objective C-NE-2.1: Design and manage transportation systems to produce the lowest feasible noise levels and impacts on noise sensitive land uses.

Objective C-NE-2.2: Provide highway, railroad, and air transportation systems and services so that the extension of the boundaries of projected 60 dBA noise contours for 2020 is discouraged.

The following policies, in addition to those of the Circulation and Transit Element, shall be used to achieve these objectives:

Policy C-NE-2a: When not in conflict with Scenic Resource (SR) zoning or other Local Coastal Program policies, encourage installation of noise reducing pavement types or other noise reducing solutions on roadways in non-industrial areas where an exterior noise level of 65 dB Ldn or more is attained and residences or other noise sensitive uses exist. **(GP2020)**

Policy C-NE-2b: Consider using truck routing, speed limits, signal timing and other traffic control measures to reduce impacts on noise sensitive uses. **(GP2020)**

Policy C-NE-2c: Consider measures to reduce peak traffic volumes as a means to reduce highway related noise. **(GP2020)**

Policy C-NE-2d: Where practical, select route alignments for new roadways and major improvements to existing highways to avoid or minimize noise impacts on noise sensitive land uses. **(GP2020)**

Policy C-NE-2e: Where practical, include noise control measures (based on vehicular volume and speed) in County funded construction of new roadways and additional through travel lanes to maintain noise compatibility with noise sensitive land uses. The

goal of these measures shall be to prevent the road project from causing the total exterior noise level to increase above 60 dBA Ldn, as estimated adjacent to dwellings and other noise sensitive primary uses. Where full implementation of such measures is not possible, desirable, or appropriate, the reasons for that determination shall be stated clearly by County decision makers. **(GP2020)**

4. IMPLEMENTATION PROGRAMS

4.1 Noise Programs

Program C-NE-1: Prepare and consider a noise control ordinance to regulate existing noise sources as follows:

- (1) The draft ordinance shall be prepared by County Counsel with the assistance of the Public Health Department, the Sheriff's Department, and Permit Sonoma.
- (2) Consider ONC guidelines and ordinances of other counties.
- (3) The intent of the ordinance shall be to protect persons from existing or future excessive levels of noise which interfere with sleep, communication, relaxation, health or legally permitted use of property.
- (4) Excessive levels of noise shall be defined as levels which exceed the standards of Table C-NE-2 and other policies of the Noise Element.
- (5) In unincorporated areas of the County, it shall be unlawful to create noise which exceeds the standards of Table C-NE-2, as measured at the exterior of any noise sensitive use.
- (6) The noise ordinance may contain maximum allowable levels of interior noise created by exterior sources.
- (7) The ordinance may exempt or modify noise requirements for agricultural uses, construction activities, school functions, property maintenance, heating and cooling equipment, utility facilities, waste collection and other sources.
- (8) The ordinance shall include responsibilities and procedures for enforcement, abatement and variances. **(GP2020)**

Program C-NE-2: Consider requiring the monitoring of noise levels for development projects to determine if noise levels are in compliance with required standards. The cost of monitoring shall be the responsibility of the applicant. **(GP2020)**

Program C-NE-3: Incorporate into the Coastal Development Code the standards and policies of the Noise Element where appropriate. **(GP2020)**

4.2 Other Initiatives

Other Initiative C-NE-1: Encourage the California Highway Patrol to actively enforce sections of the California Vehicle Code relating to adequate vehicle mufflers and modified exhaust systems. **(GP2020)**

Other Initiative C-NE-2: Make available to the public all maps or data on hand concerning the existing or future noise levels generated by transportation sources. **(GP2020)**

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PUBLIC REVIEW DRAFT

Sonoma County Local Coastal Plan

GLOSSARY September 2019



**Local Coastal Program
Permit Sonoma**

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

GLOSSARY

Unless the context clearly implies a contrary meaning or unless a rigid application of the definition would be contrary to the law, the following words, when used in the Local Coastal Plan, shall be construed as follows:

AASHTO Road Classification: A system of road classification based on the intended function of roads within the context of the overall road network. Arterial roads are intended to provide high capacity and mobility between cities, and other major population and job centers. Collectors connect local homes, job, and retail centers to the arterial network. Local roads serve individual homes, farms and businesses, and feed into the collector network. The road network functional hierarchy can be further refined by subdividing collectors and arterials into major and minor subclassifications.

There are slight differences in road geometry between rural and urban road classifications. The principal difference is the proportion of each class in the road network: Urban areas contain a relatively high number of arterials, whereas rural road networks have a fewer arterial and a relatively large number of collectors. In all classifications road width is flexible, and can be modified to suit local conditions, where necessary.

The following are road width standards for two lane roads unless otherwise noted:

Rural Local Road: For roads with design speeds of less than 40 mph and volumes under 400 vehicles per day, the standard road width is 22 feet, with the exception of steep or hilly terrain, where the width may be reduced. Road width for maximum speed (60 mph) and volume (over 2000 vehicles per day) is 40 feet.

Rural Collector (Major or Minor): For roads with design speeds of less than 40 mph and volumes under 250 vehicles per day, the standard road width is 22 feet. Road width for maximum speed (60 mph) and volume (over 2000 vehicles per day) is 40 feet.

Urban Collector (Major or Minor): Standard width is the same as Rural Collectors, with additional allowances for bicycles, sidewalks, curbs, drainage, setbacks for public utilities, street lighting, and parking.

Rural Arterial (Major or Minor): For roads with design speeds of less than 55 mph and volumes under 400 vehicles per day, the standard road width is 30 feet. Road width for maximum speed (75 mph) and volume (over 2000 vehicles per day) is 40 feet. Additional width is suggested if significant truck traffic is anticipated. Arterials are often multi-lane, and may be divided. Parking and individual driveways are discouraged.

Urban Arterial (Major or Minor): For roads with design speeds of less than 45 mph, the standard road width is 30 feet. Standard road width for maximum

speed (75 mph) and volume (over 2000 vehicles per day) is 40 feet. Additional width is suggested if significant truck traffic is anticipated. Arterials are often multi-lane, and may be divided. On street parking and individual driveways are discouraged. Allowances should be made for sidewalks, curbs, drainage, setbacks for public utilities, and street lighting. Where urban arterials intersect collectors or local roads, grade separations should be used when feasible.

Freeway: Design speed is in excess of 55 mph. Access is limited and the road is grade separated at all intersections. Travel and breakdown lanes are 12 feet wide. Maximum grade is 6%, with less than 3 percent preferred. Design of bridges, culverts, walls, tunnels, other structures should be in accordance with current Caltrans standards and AASHTO Standard Specification for Highway Bridges.

The following are horizontal road clearance standards:

Rural Local Road: 7 feet clearance from the edge of the traveled way to unyielding objects such as trees, buildings, or other fixed objects that might severely damage an out of control vehicle. The benefits of removing obstructions should be weighed against environmental or aesthetic impacts.

Collectors (Rural and Urban): 10 feet clearance from the edge of the traveled way to unyielding objects such as trees, buildings, or other fixed objects that might severely damage an out of control vehicle. The benefits of removing obstructions should be weighed against environmental or aesthetic impacts.

Arterial (Rural and Urban): Roadside should be clear and unobstructed as described in the AASHTO Roadside Design Guide. This standard involves detailed road specific calculations, but as a general rule, a clear zone of 20 feet is standard for roads with a 55 mph design speed.

Definitions and Commonly Used Terms

Abut: To touch along a border or with a projecting part; to border on.

Accessory Building: A subordinate building, the use of which is incidental to that of the main building on the same lot or building site.

Accessory Dwelling Unit: An attached or detached residential dwelling unit provided in compliance with Section 26C-325.1, which provides complete independent living facilities for one (1) or more persons, and includes separate permanent provisions for entry, living, sleeping, eating, cooking and sanitation on the same parcel as a single-family dwelling. An accessory dwelling unit may also be provided as an efficiency dwelling unit and/or a manufactured home, as defined in this section. Also known as Second Dwelling Units.

Adaptive Reuse: The process of reusing an existing building for a purpose other than which it was originally built or designed for.

Adjacent: Having a common border.

Adjoin: Lie next to or in contact with.

Affordable Housing: Housing which costs no more than 30 percent of a low or very low income household's gross monthly income. For rental housing, the residents pay up to 30 percent of gross income on full-service rent (including utilities) or the combination of rent and separate utility costs. For home ownership, residents pay up to 30 percent on the combination of mortgage payments, taxes, insurance, and utility costs.

Agricultural Area: See Agricultural Production Area

Agricultural Employee Housing: See Farmworker Housing

Agricultural Farmstay: See Farmstays

Agricultural Land: Land designated within an agricultural land use category.

Agricultural Operation: A specific agricultural use or business.

Agricultural Production Activities: Those activities directly associated with agriculture, but not including agricultural support services, processing, and visitor serving uses. This is the act of changing an agricultural product from its natural state to a different form, activities include growing, harvesting, crop storage, milking, etc.

Agricultural Production Area: Land used to produce food, fiber, or plant materials, and its immediate surrounding area.

Agricultural Support Services: Processing services, maintenance and repair of farm machinery and equipment, veterinary clinics, custom farming services, agricultural waste handling and disposal services, and other similar services.

Agricultural Tourism: Agriculturally based operation or activity that brings visitors to a farm or ranch in order to promote the sale of agricultural products produced on-site.

Agriculture: The production of food, fiber, plant materials, and the raising and maintaining of horses, donkeys, mules, and similar livestock and farm animals.

Alluvium: clay, silt, sand, gravel, or similar detrital material deposited by running water

Alternative On: Engineered septic and leach field systems that Sonoma County has been authorized to permit on a routine basis. Currently these include Filled Land, Shallow Sloping, Pressure Distribution and Mound septic systems. The Filled Land and Shallow Sloping systems are similar to Standard Septic System servicing requirements, while Mound and Pressure Distribution Systems require quarterly monitoring, an easement allowing the County to conduct annual monitoring of these systems, and an annual operating permit.

Alternative Sewage Disposal System: A non-standard sewage disposal system that has demonstrated satisfactory operation, maintenance, and monitoring under Phase I and Phase II of the Non-standard Sewage Disposal Program and approved by the County.

Alternative Transportation Mode: Low impact, non-polluting vehicles intended for personal mobility. Electric scooters are an example of an alternative transportation mode.

Animal Husbandry: See Farm Animal Production

Aquaculture: That form of agriculture devoted to the propagation, cultivation, maintenance, and harvesting of aquatic plants and animals in marine, brackish, and fresh water. "Aquaculture" does not include species of ornamental marine or freshwater plants and animals not utilized for human consumption or bait purposes that are maintained in closed systems for personal, pet industry, or hobby purposes. Aquaculture products are agricultural products, and aquaculture facilities and land uses shall be treated as agricultural facilities and land uses in all planning and permit-issuing decisions governed by the California Coastal Act.

Aquifer: A geologic formation that stores, transmits, and yields significant quantities of water into wells and springs.

Arterial: Medium to high capacity roadway serving primarily through traffic.

Base Zone: The zoning district which describes and regulates the predominant use of the land to which additional combining districts may be applied.

Bikeway: Any facility that explicitly provides for bicycle travel. Bikeways are classified into three types denoting a degree of separation from the highway, as follows: Class 1 (completely separated right-of-way designated for the exclusive use of bicycles), Class II (a restricted right-of-way designated for the exclusive or semi exclusive use of bicycles), and Class III (a shared right-of-way designated by signing or stenciling on pavement).

Biosolids: Sewage sludge that has been treated, tested and shown to be capable of being used beneficially as a soil amendment for agricultural, silvicultural, horticultural, and land reclamation activities.

Biotic Resource Area: Unique or significant plant or animal communities, including estuaries, fresh and salt water marshes, tideland resources, riparian corridors and certain terrestrial communities.

Bluff: A high bank or bold headland with a broad, precipitous, sometimes rounded cliff face overlooking a plain or body of water. A bluff may consist of a steep cliff face below and a more sloping upper bluff above.

Bluff Edge: The line of intersection between the steeply sloping bluff face and the flat or more gently sloping bluff top; or the upper termination of a bluff, cliff, or seacliff. In cases where the top edge of the bluff is rounded away from the face of the bluff as a result of erosion processes related to the presence of the steep bluff face, the bluff line or edge shall be defined as that point nearest the bluff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the bluff. In a case where there is a step-like feature at the top of the bluff face, the landward edge of the topmost riser shall be taken to be the bluff edge. Bluff edges typically retreat landward due to coastal erosion, landslides, development of gullies, or by grading (cut). In areas where the bluff top or bluff face has been cut or notched by grading, the bluff edge shall be the landward most position of either the current or historic bluff edge. In areas where fill has been placed near or over the historic bluff edge, the original natural bluff edge, even if buried beneath fill, shall be taken to be the bluff edge.

Bluff Top: The upper surface of a bluff or cliff.

Blufftop Redevelopment: Structures located between the sea and the inland extent of the sea and the first public road paralleling the sea (or lagoon) that consist of additions, exterior or interior renovations, or demolition of an existing blufftop home or other principal structure which result in:

- (1) Alteration of 50 percent or more of an existing structure, including but not limited to, alteration of 50 percent or more of the roof, foundation, exterior walls, interior load-bearing walls, or a combination of both types of walls, or a 50 percent increase floor area; or
- (2) Demolition, renovation or replacement of less than 50 percent of an existing structure where the proposed remodel would result in cumulative alterations exceeding 50 percent or more of the existing structure from the date of California Coastal Commission certification of the Sonoma County Local Coastal Plan (December 2, 1981).

Bodega Harbor Tideflats: A marshy, sandy or muddy nearly horizontal coastal flatland which is alternately covered and exposed as the tide rises and falls. Vegetation is limited to algae and some other wetland vegetation.

Building Envelope: A defined location or locations on a parcel.

Build out: A theoretical level of development which assumes that every parcel of land will develop to the maximum allowed by a plan or zoning.

Channelization: The straightening and/or deepening of a water course for purposes of stream runoff control or ease of navigation. Channelization often includes the lining of stream banks with retaining material such as concrete.

Circulation: The movement of goods and people within a region.

Clear cutting: A method of timber harvest as defined by the California Department of Forestry and Fire Protection.

Clustered Development: Development in which a number of dwelling units are placed in closer proximity than usual, or are attached, with the purpose of retaining an expanse of undeveloped or less developed land.

Coast: The part of the land near the sea; the edge of the land.

Coastal Bluffs: Area between the cliff edge and the highest high tide line. Bluffs or cliffs are scarps or steep faces of rock, decomposed rock, sediment or soil resulting from erosion, faulting, folding or excavation. When the top edge of the cliff is rounded away from the face of the cliff, the edge shall be defined as that point nearest the cliff beyond which the downward gradient of the land surface increase more or less continuously until it reaches the general gradient of the cliff.

Coastal County: A county or city and county which lies, in whole or in part, within the coastal zone.

Coastal-Dependent Development or Use: Any development or use which requires a site on, or adjacent to, the sea to be able to function at all.

Coastal-Related Development: Any use that is dependent on a coastal-dependent development or use.

Coastal Development Permit: A permit for any development within the coastal zone that is required pursuant to subdivision (a) of Section 30600 of the California Coastal Act.

Coastal Plan: The California Coastal Zone Conservation Plan prepared and adopted by the California Coastal Zone Conservation Commission and submitted to the Governor and the Legislature on December 1, 1975, pursuant to the California Coastal Zone Conservation Act of 1972 (commencing with Section 27000).

Coastal Redevelopment: Development that is located on a bluff top or at or near the ocean and land interface or at very low-lying elevations along the shoreline that consists of alterations including: 1) additions to an existing structure; 2) exterior or interior renovations; or 3) demolition of an existing bluff top home or other principal structure, or portions thereof, which results in:

- (1) Alteration of 50 percent or more of major structural components including exterior walls, floor and roof, and foundation; or a 50 percent increase in floor area. Alterations are not additive between individual major structural components; however, changes to individual major structural components are cumulative over time from the effective date of the Coastal Act (January 1, 1977).
- (2) Demolition, renovation, or replacement of less than 50 percent of a major structural component where the proposed alteration would result in cumulative

alterations exceeding 50% or more of a major structural component, taking into consideration previous alterations approved on or after the effective date of the Coastal Act (January 1, 1977); or an alteration that constitutes a less than 50 percent increase in floor area where the proposed alteration would result in a cumulative addition of greater than 50 percent of floor area, taking into consideration previous additions approved on or after the effective date of the Coastal Act (January 1, 1977).

Coastal Prairie and Grassland: Discontinuous grassland usually within 100 km of the coast; usually on southerly facing slopes or terraces. This habitat type is characterized by a mixture of heavily grazed, introduced annual grasses and some native perennial grasses, generally underlain by sandy to clay loam surface soils. This mapping category does not indicate pristine coastal prairie.

Coastal Woodland: Category grouping the redwood, mixed evergreen, closed cone pine, and oak woodland forests.

Coastal Zone: That land and water area of the State of California from the Oregon border to the border of the Republic of Mexico, specified on the maps identified and set forth in Section 17 of that chapter of the Statutes of the 1975-76 Regular Session enacting this division, extending seaward to the state's outer limit of jurisdiction, including all offshore islands, and extending inland generally 1,000 yards from the mean high tide line of the sea. In significant coastal estuarine, habitat, and recreational areas it extends inland to the first major ridgeline paralleling the sea or five miles from the mean high tide line of the sea, whichever is less, and in developed urban areas the zone generally extends inland less than 1,000 yards. The coastal zone does not include the area of jurisdiction of the San Francisco Bay Conservation and Development Commission, established pursuant to Title 7.2 (commencing with Section 66600) of the Government Code, nor any area contiguous thereto, including any river, stream, tributary, creek, or flood control or drainage channel flowing into such area.

Collector: A relatively low speed, low volume roadway which provides circulation within and between neighborhoods which is intended to collect trips from local streets and distribute them to the arterial network.

Combining District: A zoning designation which is superimposed over a base zoning district to modify the regulations in the base zoning district.

Commercial Fishing: See Marine Industrial

Community Noise Exposure Level (CNEL): CNEL is a measure of the cumulative effect of individual noise events averaged over a 24-hour period and weighted by the time of occurrence.

Compatible, Congenial, Harmonious with: As used in the land use and other elements, referring to land uses and types of development that can exist together without creating a conflict.

Conservation: The management of natural resources to prevent waste, depletion, destruction, or neglect.

Constraints: Impediments to development, such as slope instability, lack of adequate water.

Countywide: Sonoma County in its entirety; both the unincorporated areas and the Cities.

Cultivation: The act of preparing the soil for the raising of crops.

Cultural Resources: Physical evidence or place of past human activity: site, object, landscape, structure; or a site, structure, landscape, object or natural feature of significance to a group of people traditionally associated with it.

Cumulative Effect: The incremental effects of an individual project which shall be reviewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Defensible space: A buffer zone created between a building on your property and the grass, trees, shrubs, or any wildland area that surrounds the building in order to slow or stop the spread of wildfire to protect your building from catching fire.

Density: As generally used in the land use element, the term refers to the number of acres per residential dwelling unit or the number of dwelling units per acre.

Development: On land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511). As used in this definition, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

Discretionary Project or Permit: A project or permit which the decision making body may approve, approve with conditions or deny.

Disruption of Habitat Values: Physical removal, destruction, damage, disturbance, fragmentation, or contamination of air, land, water, soil, and vegetation of an area which cause the plant and animal habitats in the area to be removed, replaced by other habitats, or degraded to the point where the habitats are functionally unable to support the plant and animal species originally present.

Drainage Basin: A drainage basin is any area of land where precipitation collects and drains off into a common outlet, such as into a river, bay, or other body of water.

Dunes and Coastal Strand: Coastal dunes are sandy beach materials formed into dunes by the wind. Most of the ground is bare sand, either actively moving or stabilized by a vegetative cover: low growing annual or perennial herbs with low water requirements and a high salt tolerance. (Coastal Strand is the plant community found on sandy beaches and dunes scattered along the entire coast).

Dwelling Unit: A residence containing cooking, sleeping and sanitation facilities used to house the members of a household. Within the meaning of the General Plan, dwelling unit does not include a second dwelling as defined in the Sonoma County Code Section 26-10, nor to Farmworker and Farm Family Housing.

Earthquake Epicenter: The point on Earth's surface directly above the focus point of where the earthquake is originating underground.

Easement: Usually the right to use property owned by another for specific purposes.

Easement; Conservation, Scenic, or Open Space: An interest in real property whereby open space is secured.

Effluent: Liquid waste or sewage discharged into a river or the sea

Embankment: A man-made ridge, bank, mound, or dike of earth, gravel, or stone that carries a road or railway or confines or holds back water in a waterway.

Emergency Service: Emergency services conducted by public agencies or private firms including the following:

- (1) Fire services including wildland fire suppression
- (2) Police services
- (3) Medical services

Energy Facility: Any public or private processing, producing, generating, storing, transmitting, or recovering facility for electricity, natural gas, petroleum, coal, or other source of energy.

Environment: The circumstances, objects, or conditions by which one is surrounded. The physical conditions including both natural and man-made, which exist within an

area including land, air, water, minerals, flora, fauna, noise, and objects of historic or aesthetic significance.

Environmentally Sensitive Habitat Area: Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Environmentally sensitive habitat areas include those areas which meet one of the following criteria: (1) habitats containing or supporting "rare and endangered" species as defined by the State Fish and Game Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes.

Environmentally Suitable: Having minimal or insignificant adverse impact on the environment.

Environmental Review: The identification and analysis of the potential adverse impacts of a proposed development on the environment conducted pursuant to the California Environmental Quality Act (Public Resources Code 21000 et seq); the California Environmental Quality Act Guidelines (Title 14, California Administrative Code Section 15000 et seq); and Sonoma County Code Section 23A-1 et seq.

Erosion: The loosening and transportation of rock and soil debris by wind, rain, or other running water or the gradual wearing away of the upper layers of the earth.

Estuary: The lower course of a river or stream where tidal influence is noticeable; the mixing zone of fresh and salt waters near the mouth of a river or stream.

Farm Animal Production: The raising, breeding, and maintaining of horses, donkeys, mules, and similar livestock and farm animals.

Farm Retail Sales: A small-scale retail facility for year-round sales of agricultural products grown or raised on the site or other properties owned or leased by the farm operator, and pre-packaged goods processed from onsite agricultural production, excluding alcoholic products. Examples include dairy and meat products that require refrigeration. Small-scale farm retail sales must be in compliance with the County Code. Sampling of products grown or processed on-site may be allowed with a Retail Food Facility Permit. Incidental sales of merchandise or goods not produced onsite is limited to ten percent (10%) of the floor area up to a maximum of fifty (50) square feet.

Farm Stand: An area for the temporary or seasonal sales and promotion of agricultural products that are grown or raised on the site and pre-packaged, shelf stable goods processed from onsite agricultural production, excluding alcoholic products. Examples include: produce, eggs, honey, jams, pickles, nuts, olive oil, and similar products. Farm

stands must be consistent with Section 47050 of the Food and Agricultural Code and Section 113778.2 of the Public Health and Safety Code. Sampling of products grown on-site may be allowed with a Retail Food Facility Permit. Incidental sales of merchandise or goods not produced on site is limited to ten percent (10%) of the floor area up to a maximum of fifty (50) square feet.

Farmland of Local Importance: Farmland other than Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. This land may be important to the local economy due to its productivity or value, as defined by the Board of Supervisors.

Farmstay: Transient lodging accommodations containing five or fewer guestrooms in a single- family dwelling or guest quarters provided as part of a farming operation, with an on-site farmer in residence, that includes all meals provided in the price of the lodging, and that meets all of the standards in the County Code.

Farmworker Housing: A dwelling unit or dwelling units occupied by persons employed by agricultural operations, and their dependents.

Feasible: That which is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal and technological factors.

Federal Coastal Act: The Federal Coastal Zone Management Act of 1972 (16 U.S.C. 1451, et seq.), as amended.

Fill: Earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area.

Fish or Wildlife Corridor: A habitat linkage that joins two or more areas of fish or wildlife habitat, allowing for fish passage or the movement of wildlife from one area to another.

Flood, 100-year: The magnitude of a flood expected to occur on the average every 100 years, based on historical data. The 100-year flood has a 1/100, or one percent, chance of occurring in any given year.

Flood Control: Measures that are taken to increase the hydrologic capacity of a natural water course or to create new man-made channels or reservoirs to drain and contain precipitation that otherwise exceeds the capacity of the water course, in an effort to reduce flood damage, usually to man made improvements.

Flood Plain: The land area adjacent to a watercourse, drainage way, or creek which has been or may be covered by floodwaters. The boundaries of a flood plain are typically described in terms of the magnitude of a flood event such as the "100 year flood plain".

Floodway: The portion of a stream channel and the adjacent flood plain that must be reserved in order to discharge the 100-year flood without cumulatively increasing the water surface more than one foot. The Flood Insurance Rate Maps show floodway boundaries for those streams studied as part of that program.

Fluvial: Of or found in a river.

Goal: A general statement of a desired end toward which an effort will be directed.

Guest Ranch: The guest ranch, also known as a dude ranch, is a type of ranch oriented towards visitors or tourism. It is also another form of Agritourism.

Guest Quarters: An accessory building to a single family dwelling which consists of a detached living area of a permanent type of construction. A guest house may contain a full or half bathroom, but may not contain provisions for appliances or fixtures for the storage and/or preparation of food, including, but not limited to, refrigeration, dishwashers or cooking facilities. The building shall not be leased, subleased, rented or sub-rented separately from the main dwelling except that a legal, fully permitted guest house may be used as a hosted rental. The floor area of a guest house shall be a maximum of six hundred forty (640) square feet. Floor area shall be calculated by measuring the exterior perimeter of the guest house and the length of any common walls. In the case of straw bale or similar construction, floor area may be calculated using interior dimensions. For the purpose of calculating the maximum size of a guest house, any storage area attached to the guest house, excluding garage, shall be included. A guest house shall be located closer to the primary dwelling on the subject lot than to a primary dwelling on any adjacent lot. The guest house shall not be located more than one hundred feet (100') from the primary dwelling on the subject lot, except where the planning director determines that a greater setback is appropriate in light of topography, vegetation or unique physical characteristics.

Habitat Connectivity Corridor: A linkage needed to allow movement of wildlife across the landscape.

Headway: The time interval between transit vehicles, such as trains busses or ferries, moving in the same direction on a particular route.

Heritage Road: A public road with unique scenic, historic, recreational, cultural, archeological and/or natural qualities that may be compromised if the road is fully improved to meet current road standards.

High Public Occupancy: A building or structure with an occupant load of 300 or more persons, as determined by the occupant load calculation in the current adopted California Building Code.

Hosted Rental: A single family dwelling, with an owner in residence, where no more than one (1) bedroom, sleeping area or guest quarters, is available, used, let or hired

out for transient use, subject to standards in the County Code. See also Vacation Rental.

Household: The year round occupants of a dwelling unit.

Indemnity: Is a contractual obligation of one party to compensate the loss occurred to the other party due to the act of the indemnitor or any other party.

Impaired Surface Waters: A surface body or segment of water that does not meet applicable water quality standards.

Implementation: Actions, procedures, programs, or techniques that carry out policies.

Implementing Actions: The ordinances, regulations, or programs which implement either the provisions of the certified local coastal program or the policies of this division and which are submitted pursuant to Section 30502 of the California Coastal Act.

Incidental Sales: Sales of goods and products that are accessory and subordinate to the primary use of a property and conducted so as not to significantly change the character, appearance, or operation of the primary use.

Indicators: Quantifiable parameters and representative measurements of demographic, economic, social, environmental, and other conditions related to the quality of life and the effectiveness of General Plan goals, objectives, and policies.

Infill Development: Development of vacant or under used land (usually individual lots or left-over properties) within areas which are already largely developed.

Infrastructure: Public services and facilities, such as sewage disposal systems, other utility systems, and roads; generally refers to physical improvements as opposed to social services.

Junior Accessory Dwelling Unit: A living space not exceeding five hundred (500) square feet in size and contained entirely within a legally established bedroom within the walls of an existing, fully permitted single-family dwelling. A junior accessory dwelling unit shall include an efficiency kitchen, and may include separate sanitation facilities or share sanitation facilities with the existing structure.

Land Use: The occupation or utilization of land or water area for any human activity or purpose.

Land Use Plan: The relevant portion of a local government's general plan, or local coastal element which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies and, where necessary, a listing of implementing actions.

Lateral Accessway: Accessway that extends from the mean high tide line landward to a defined line, such as the intersection of the sand with the toe of a revetment, vertical face of a seawall, toe of a bluff, or other feature.

Lead Agency: Means the public agency which has the principal responsibility for carrying out or approving a project.

Level of Service (LOS): Qualitative measure used to relate the quality of motor vehicle traffic service. LOS is used to analyze roadways and intersections by categorizing traffic flow and assigning quality levels of traffic based on performance measure like vehicle speed, density, congestion, etc.

Liquefaction: Occurs when a saturated or partially saturated soil substantially loses strength and stiffness in response to an applied stress such as shaking during an earthquake or other sudden change in stress condition, in which material that is ordinarily a solid behaves like a liquid.

Live-Work Use: Conduct of a business within a dwelling unit or accessory structure by occupants of the dwelling unit and employees, with the business activities being subordinate to the residential use of the site. Live/work is distinguished from home occupation, primarily in that the use involves more intensive activities and includes employees other than the residents of the dwelling. All live/work uses shall be conducted in accordance with the County Code.

Local Agency Formation Commission (LAFCO): A County commission that reviews and evaluates all proposals for the formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, merger of districts with cities, and setting of spheres of influence. Each county's LAFCO is empowered to approve, disapprove, or conditionally approve these proposals.

Local Area: Any of the unincorporated communities within the County or a geographic area, such as a valley, that is lesser in area than the planning area in which it is located.

Local Coastal Element: That portion of a general plan applicable to the coastal zone which may be prepared by local government pursuant to this division, or any additional elements of the local government's general plan prepared pursuant to Section 65303 of the Government Code, as the local government deems appropriate.

Local Coastal Program: A local government's (a) land use plans, (b) zoning ordinances, (c) zoning district maps, and (d) within sensitive coastal resources areas, other implementing actions, which, when taken together, meet the requirements of, and implement the provisions and policies of, the California Coastal Act at the local level.

Local Government: Any chartered or general law city, chartered or general law county, or any city and county.

Lot: See Parcel

Lot Size, Minimum: The smallest size parcel which is permitted to be created if a lot can be subdivided.

Major Employment Center: An area that is exclusively industrial and/or commercial with a total employment of 500 persons or more.

Major Subdivision: The division of any parcel or parcels of improved or unimproved land into five (5) or more parcels, pursuant to the provisions of the Subdivision Map Act (Government Code 66410 et seq) and the Subdivision Ordinance (Sonoma County Code, Chapter 25).

Marine Industrial: Land designated for or occupied by marine industrial development. The MI land use category encompasses land to accommodate a variety of commercial, light to medium industrial, and service uses which support the commercial fishing and other coastal dependent industries which depend on the marine environment and resources.

Maximum Single-event Noise Level (Lmax): Lmax is a measure that indicates the maximum noise level reached during a single event (i.e., aircraft overflight), expressed in dBA, at a specified point of measurement.

Minor Subdivision: The division of any parcel or parcels of improved or unimproved land into four (4) or fewer parcels, pursuant to the provisions of the Subdivision Map Act (Government Code 66410 et seq) and the Subdivision Ordinance (Sonoma County Code, Chapter 25).

Mitigate: To ameliorate, alleviate, or avoid to the extent reasonably feasible.

Mitigation Measure: An action or series of actions designed to avoid or lessen the extent of an adverse impact of a project, pursuant to the provisions of the California Environmental Quality Act Guidelines (14 Cal. Adm. Code Sec 15370).

Moratorium: Is a temporary suspension of an activity or a law until future events warrant lifting the suspension or issues regarding the activity have been resolved.

National Hydrography Dataset (NHD): The National Hydrography Dataset (NHD) is a combined dataset that provides hydrographic data for the United States. The NHD is the culmination of recent cooperative efforts of the U.S. Environmental Protection Agency (USEPA) and the U.S. Geological Survey (USGS). It combines elements of USGS digital line graph (DLG) hydrography files and the USEPA Reach File (RF3). The DLG Hydrography layer is primarily focused on flowing water, standing water, and wetlands. According to the USGS, these data are digital vector representations of cartographic information derived from USGS maps and related sources.

National Wetland Inventory (NWI): The NWI is a nationwide inventory of U.S. wetlands to provide biologists and others with information on the distribution and type

of wetlands to aid in conservation efforts. The NWI maps show the location and type (classification) of wetlands and deepwater habitats (streams, lakes, and estuaries) based on the official FWS wetland classification system (Cowardin et al. 1979).

Natural Resource: Something (as a mineral, waterpower source, forest, or kind of animal) that occurs in nature.

Noise: Unwanted sound produced by human activity that interferes with communication, work, rest, recreation, speech, and sleep.

Non-Conforming Use: A lawful use existing on the effective date of a zoning ordinance restriction and continuing since that date in nonconformance to the restriction.

Objective: A specific detailed statement of a desired future condition toward which the County is committed and progress is measurable.

Onsite Wastewater Treatment Systems: An individual wastewater treatment and dispersal system, small community collection, treatment and dispersal systems, or alternative collection and dispersal systems that use subsurface dispersal. These systems are commonly referred to as "septic systems".

Open Space: Any parcel or area of land or water which is essentially unimproved and devoted to an open space use as defined in Section 65560(b) of the Government Code.

Parcel: A legally defined lot, or contiguous group of lots, in single ownership or under single control, usually considered a unit for purposes of development.

Peak Hour: For any given roadway, the daily 60-minute period during which traffic volume is highest.

Performance Standards: Standards or criteria for regulating or determining the acceptability of certain land uses based upon the performance of the use.

Permit: Any license, certificate, approval, or other entitlement for use granted or denied by any public agency which is subject to the provisions of the California Coastal Act.

Permitted Use: A typical land use that is allowed within a particular General Plan Land Use category. A permitted use is considered to be consistent with and to further the objectives of the General Plan. Such a use may also be subject to performance or other development standards and approvals in the zoning ordinance.

Person: Any individual, organization, partnership, limited liability company, or other business association or corporation, including any utility, and any federal, state, local government, or special district or an agency thereof.

Places of Public Assembly: Meeting halls, schools, hospitals, and other associated medical facilities, mosques, temples, or other places of religious worship.

Planning Areas: Nine (9) geographic subunits of the County.

Policy: Specific statement that guides decision making in order to achieve a goal or objective.

Practical: See Feasible.

Preservation: Restoration or protection from deterioration of features having environmental, cultural, historic, or other resource value.

Primary or Predominant Use: The prevailing use of the land.

Prime Agricultural Land: Those lands defined in paragraph (1), (2), (3), or (4) of subdivision (c) of Section 51201 of the Government Code.

Productive Agricultural Land: Land currently used or capable of being used for the production of food, fiber or plant materials.

Public Services: Infrastructure, including roads, sanitary sewers, storm drains and water mains and social services, including police, fire, health, schools, transit, recreation and libraries.

Public Works: (a) All production, storage, transmission, and recovery facilities for water, sewerage, telephone, and other similar utilities owned or operated by any public agency or by any utility subject to the jurisdiction of the Public Utilities Commission, except for energy facilities; (b) All public transportation facilities, including streets, roads, highways, public parking lots and structures, ports, harbors, airports, railroads, and mass transit facilities and stations, bridges, trolley wires, and other related facilities; (c) All publicly financed recreational facilities, all projects of the State Coastal Conservancy, and any development by a special district; and (d) All community college facilities.

Public Utility Facility: A facility for the provision of water, light, heat, communications, power, or for sewage collection, treatment, or disposal.

Public Water Supplier: One of the following types of entities:

- (1) Sonoma County Water Agency
- (2) Incorporated Cities
- (3) The following suppliers for Urban Service Areas:
 - Bodega Bay Public Utility District
 - The Sea Ranch Water System

(4) The following County-operated community systems:

Sonoma County Service Area 41 - Jenner

Sonoma County Service Area 41 - Salmon Creek

Timber Cove County Water District

(5) The following other community system serving more than 500 year-round residents:

Russian River County Water System

(6) Any new public water suppliers which meet any of the following criteria:

Incorporated cities

Suppliers for urban service areas

County-operated community systems

Community systems serving more than 500 year-round residents

Public Water System: A connected system of pipelines, pumps, valves, treatment plants, storage tanks, reservoirs and related facilities providing water to multiple users.

Recreation Use – Active: Swimming pools, tennis courts, golf courses, driving ranges, community centers, and similar facilities.

Recreation Use – Passive: Outdoor amenities for hiking, viewing, surfing, fishing, swimming, picnicking, non-motorized boating, trail riding, and similar activities.

Recycled Water: Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource.

Redevelopment Project: An activity undertaken by a Redevelopment Agency set up under State law to revitalize blighted areas as defined by the Health and Safety Code.

Responsible Agency: As defined by the State CEQA guidelines, the term Responsible Agency includes all public agencies other than the lead agency which have discretionary approval power over a project.

Resource Agency: A federal or state agency having jurisdiction by law over natural resources affected by an activity or use. Resource agencies include the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, NOAA Fisheries, California Department of Fish and Wildlife, North Coast and San Francisco Bay Regional Water Quality Control Boards, State Water Resources Control Board, and other similar federal and state agencies.

Ridgeline: A line connecting the highest points along a ridge.

Right of Way: The strip of land required to build certain transportation and public use facilities, such as roadways, railways, and public utility lines.

Riparian: Associated with or dependent upon a river, stream or other water body.

Riparian Corridor: In general, the area occupied by rivers or streams and related plant and animal communities. A line or belt of vegetation following the course of a river or stream on the immediate banks and appearing visually and structurally separate from the surrounding landscape. Boundaries are delineated by the outer edge of riparian vegetation. Riparian vegetation consists of that vegetation in or adjacent to permanent or intermittent freshwater streams and other freshwater bodies where at least 50 percent of the cover is made up of species such as alders, willows, cottonwoods, box elders, ferns, and blackberries. As used in the Open Space and Resource Conservation Element, the areas occupied by rivers or streams designated on **Figures C-OSRC-2a** through **C-OSRC-2k** and related plant and animal communities.

Riparian Functions: The beneficial uses of areas in and along streams, including: providing food, water, and breeding, egg deposition and nesting areas for fish, amphibians, reptiles, birds, insects, and mammals; providing protective cover, shade and woody debris to stream channels as habitat for coho salmon, steelhead, freshwater shrimp, and other protected and common aquatic-dependent species; providing movement opportunities, protective cover, and breeding, roosting, and resting habitat for terrestrial wildlife; filtering sediment and pollutants in runoff into streams; providing erosion protection for stream banks; and facilitating groundwater recharge.

Rocky Intertidal: Coastal rocky shore between the highest high tide line and the low tide line.

Rural: A comprehensive term contrasting to urban. Those areas not intended for urban development.

Scenic Corridor: As designated on **Figures C-OSRC-1a** through **C-OSRC-1k** of the Open Space and Resource Conservation Element, a strip of land of high visual quality along a certain roadway.

Scenic Highway: Those roadways in Sonoma County that have been so designated by the State of California.

Scenic Landscape Unit: A landscape of special scenic importance in Sonoma County which provides important visual relief from urban densities.

Sea: The Pacific Ocean and all harbors, bays, channels, estuaries, salt marshes, sloughs, and other areas subject to tidal action through any connection with the Pacific Ocean, excluding non-estuarine rivers, streams, tributaries, creeks, and flood control and drainage channels. "Sea" does not include the area of jurisdiction of the San Francisco Bay Conservation and Development Commission, established pursuant to Title 7.2 (commencing with Section 66600) of the Government Code, including any

river, stream, tributary, creek, or flood control or drainage channel flowing directly or indirectly into such area.

Second Dwelling Unit: See Accessory Dwelling Unit

Secondary Use: As used in the General Plan land use categories, a use permitted within a special land use category based on its compatibility with the primary or predominant use therein.

Seiche: A seiche has to occur in an enclosed body of water such as a lake, bay or gulf. A seiche is a standing wave that oscillates in a lake as a result of seismic or atmospheric disturbances creating huge fluctuations of water levels.

Sensitive Coastal Resource Areas: Those identifiable and geographically bounded land and water areas within the coastal zone of vital interest and sensitivity, including the following:

- (a) Special marine and land habitat areas, wetlands, lagoons, and estuaries as mapped and designated in Part 4 of the coastal plan.
- (b) Areas possessing significant recreational value.
- (c) Highly scenic areas.
- (d) Archaeological sites referenced in the California Coastline and Recreation Plan or as designated by the State Historic Preservation Officer.
- (e) Special communities or neighborhoods which are significant visitor destination areas.
- (f) Areas that provide existing coastal housing or recreational opportunities for low- and moderate-income persons.
- (g) Areas where divisions of land could substantially impair or restrict coastal access.

Setbacks: The distance a building or use must be withdrawn from a road right-of-way, watercourse, parcel boundary or other designated feature.

Side Friction: The movement of vehicles outside of the main flow of traffic which may interrupt the efficient flow of traffic such as parking and entering or leaving driveways.

Silviculture: A branch of forestry dealing with the development and care of forests.

Single-Event Noise Exposure Level (SENEL): SENEL is a measure of the noise generated by a single aircraft overflight. It includes the loudness of the event during the time interval that the event is above the threshold level.

Single Room Occupancy Units: A cluster of residential units, each unit being substantially smaller in size than a typical apartment unit, within a residential hotel, motel, or similar facility providing sleeping or living facilities in which sanitary and

kitchen facilities may be either shared within the project or provided in each unit. Single Room Occupancy Units are for the purpose of providing affordable housing, and not for the purpose of serving recreational or travel needs.

Smart Growth, Planned Growth: Development that is environmentally sensitive, economically viable, community-oriented, and sustainable. These goals are reached through planning that incorporates the following principles:

- (1) Encourage infill development of urbanized communities
- (2) Create range of housing opportunities and choices
- (3) Encourage compact building design
- (4) Protect agriculture and open space
- (5) Create walkable neighborhoods
- (6) Enable choice in transportation modes that are integrated and consistent with land use objectives
- (7) Create fair and equitable rules for development

Sonoma County Stream Identification: The DLG files (part of the NHD dataset) are the primary source of stream mapping in Sonoma County. Review of the digital mapping for Sonoma County indicates that the DLG does not map all of the streams within each watershed, particularly smaller tributary streams and those in the uppermost reaches of each watershed. NWI maps are based on the location of wetland habitat and contain comprehensive information on the location and type (classification) of deepwater habitats (streams, lakes, and estuaries). NWI data is more comprehensive than the USGS DLG Dataset for identifying the likely location of water-oriented habitat resources within the drainage network. As such, this LCP makes use of NWI in addition to DLG data to identify streams within the Coastal Zone.

Sound: Variations in air pressure that the ear can detect.

Special District: Any public agency, other than a local government as defined in this chapter, formed pursuant to general law or special act for the local performance of governmental or proprietary functions within limited boundaries. "Special District" includes, but is not limited to, a county service area, a maintenance district or area, an improvement district or improvement zone, or any other zone or area, formed for the purpose of designating an area within which a property tax rate will be levied to pay for service or improvement benefiting that area.

Special Treatment Area: An identifiable and geographically bounded forested area within the coastal zone that constitute a significant habitat area, area of special scenic significance, and any land where logging activities could adversely affect public recreation area or the biological productivity of any wetland, estuary, or stream especially valuable because of its role in a coastal ecosystem.

Specimen Tree: Means a tree which has departed in some respect from the standard characteristic of the species and has developed a character of shape, size, or branch structure that gives it special interest.

Stream: For purposes of this LCP, stream shall be defined as any blue line stream as mapped by 1) USGS on the 7.5-minute quadrangle series, 2) the USGS National Hydrography Dataset (NHD), 3) the USFWS National Wetlands Inventory (NWI), or 4) any local government-approved stream resource maps. This stream definition shall be used in all LCP contexts when referring to streams. Stream data from the three statewide/national sources in addition to any high resolution local stream mapping sources shall be used to determine the location and identification of streams.

Subdivision: The division of a lot, tract, or parcel of land into two or more lots, plats, sites, or other divisions of land for the purpose, whether immediate or future, of sale or of building development.

Sustainability: That which meets our current needs without compromising the ability of future generations to meet their needs.

Sustainable yield: The amount of water that can be used over the long term without exceeding the replenishment rates over time or causing long term declines in available surface or groundwater resources.

Telecommunication Facility: Facility that sends and/or receives electromagnetic signals, including antennas and towers to support receiving and/or transmitting devices along with accessory structures, and the land on which they are all situated.

Traffic Analysis Zones: A statistical geographical unit for information related to traffic generation and transportation modeling.

Traffic Calming: A combination of alterations and improvements to the road network intended to reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users. The purpose of traffic calming is to reduce the speed and volume of traffic to acceptable levels for the functional class of a street and the nature of existing uses along the street in order to improve traffic safety and preserve community character.

Transient Use or Transient Occupancy: Means occupancy of a lodging facility or residence by any person other than the primary owner by concession, permit, right of access, license, gift or other agreement for a period of thirty (30) consecutive calendar days or less, counting portions of calendar days as full days.

Transit: The conveyance of persons from one place to another on a public transportation system.

Transit Center: An area that is designed for several bus and/or rail routes. Transit centers will usually have multiple passenger facilities, such as shelters and benches, and

also will usually have some form of information available for the passengers, this may include a staffed information center where passengers can buy passes and get printed schedules.

Transmission line: A conductor for transmitting electrical or optical signals or electric power such as a cable or power line.

Transportation: The conveyance of goods and people from one place to another.

Transportation Demand Management (Federal Highway Administration) or Traffic Demand Management (Caltrans): Programs and strategies that reduce congestion through reduction of demand, rather than increasing capacity or supply. The goal of TDM is to reduce the number of vehicles using highway facilities while providing a wide variety of mobility options for those who wish to travel. Examples of TDM are:

- (1) High occupancy vehicle lane
- (2) Alternative work hours
- (3) Ride sharing programs
- (4) Telecommuting
- (5) Land use policies that reduce distance between jobs and housing.

Unincorporated Community: Areas within the County's jurisdiction that have some or all urban services that support urban level densities.

Urban: Contrasting with rural, pertaining to uses of land typically occurring within cities, such as high density residential, commercial, and industrial uses.

Urban Development: Development occurring within urban land use categories (urban residential, commercial, industrial and public/quasi-public categories within Urban Service Areas).

Urban Growth Boundary: A voter designated limit to the urban development of a city.

Urban Service Area: The geographical area within the Urban Service Boundary that is designated for urban development on **Figures C-LU-1a** and **C-LU-1b** of the Land Use Element.

Urban Services: The full range of public services and infrastructures including sewer, water, police and fire protection, roads and transit etc.

Urban Service Boundary: A designated limit to the urban development of the cities and unincorporated communities of the County.

Use Permit: Required for the use of land or land development when required by the Zoning Ordinance, typically for projects that have potential for negative impacts on the surrounding land uses.

Vacation Rental: A property with a single-family home intended for permanent occupancy that is occupied for transient use by any person other than the primary owner; or is otherwise occupied or used on a transient basis. Vacation rental does not include occasional home exchanges that are not otherwise subject to Transient Occupancy Tax, hosted rentals, or a bed and breakfast inn permitted and operated in accordance with the Sonoma County Zoning Code Regulations.

Vegetation Removal: The cutting, breaking, burning or uprooting of vegetation or the application of herbicide to vegetation, or the covering over of vegetation with earth or the compacting of the soil under, around or over said vegetation. For the purposes of this definition, vegetation means all natural, non-cultivated growth of plant life including the root system, the stem, trunk, crown or branches or leaves or blades.

Vehicle Miles of Travel (VMT): A unit to measure vehicle travel made by a private vehicle, such as an automobile, van, pickup truck, or motorcycle. Each mile traveled is counted as one vehicle mile regardless of the number of persons in the vehicle.

Viable: Capable of success or continued effectiveness. For land uses, having the apparent physical characteristics necessary to accomplish the use.

Viewshed: The area visible from a defined observation point.

Wastewater: Any water that has been affected by human use

Watershed: The area of land that includes a particular river or lake and all the rivers, streams, and creeks that flow into it.

Water User: A person or entity whose diversion, appropriation, extraction, acquisition, storage or usage of water meets all applicable legal requirements.

Wetland: Lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

An area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of plants which normally are found to grow in water or wet ground. Wetlands are here defined to include marshes, ponds, seeps, and reservoirs, but not the Bodega Harbor tide flats. The upland limit of a wetland is designated as 1) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover; 2) the boundary between soil that is predominantly hydric and soil that is predominantly non-hydric. Typical wetland vegetation: pickleweed, cordgrass, Jaumea, salt grass, rushes, bulrushes, sedges, cattails, tule, marsh rosemary, marsh grindelia.

Wildlife Corridor: see Fish or Wildlife Corridor

Williamson Act: The California Land Conservation Act of 1965 (as it may be amended from time to time) that allows Counties to establish agricultural preserves through agreements with property owners to maintain agricultural uses in exchange for property tax benefits.

Zoning District: A designated section of the County for which prescribed land use requirements and building and development standards are uniform.

Zoning Ordinance: An ordinance authorized by Section 65850 of the Government Code or, in the case of a charter city, a similar ordinance enacted pursuant to the authority of its charter.

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