SONOMA COUNTY GENERAL PLAN 2020

General Plan Update

Final
Environmental Impact Report

Volume 2

SONOMA COUNTY
PERMIT AND RESOURCE
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Sonoma County General Plan 2020
Final Environmental Impact Report

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TABLE OF CONTENTS

1.0 Volume 1

1.1 Introduction to Comments and Responses
1.2 List of Agencies/Persons Commenting
1.3 Comment Letters

2.0 Volume 2

2.1 Master Responses
2.2 Responses to Comments

3.0 Volume 3

3.1 Sonoma County General Plan 2020 Draft Environmental Impact Report

2.1 MASTER RESONSES

GP 2020 DEIR Master Responses

Master Response A
DEIR REVIEW PERIOD

CEQA requires a public review period of at least 45 days for a DEIR that is submitted to the State Clearinghouse for review by state agencies (Pub. Res. Code, § 21091). The CEQA Guidelines clarify that the public review period for a Draft EIR should not be longer than 60 days "except for unusual circumstances" (CEQA Guidelines, § 15105(a)). In recognition of the importance of the General Plan to the citizens of Sonoma County, the size of the DEIR addressing the impacts of the General Plan, and the expressed desire of a number of public interest groups to review the DEIR in detail, an initial review period of 60 days (January 16, 2006 - March 17, 2006) was established by the County. During the review period, many interested citizens requested additional time for submittal of comments. In response to those requests, the Planning Commission extended the review period for an additional 31 days to April 17, 2006, for a total review period of 91 days.

Master Response B
JURISDICTION

A number of comments question why Draft GP 2020 includes policies that encourage, rather than compel, certain actions. In many instances, these comments appear to reflect a misconception regarding the County's authority to compel the actions that will accomplish the intended purpose of a particular policy. The Draft GP 2020 contains goals, objectives, and policies that establish future County policy regarding many different issues and problems related to land use planning. These goals, objectives, and policies will guide the County's and, to some extent, other agencies' future decision making regarding resource protection and proposed development. However, the County does not control many of the decisions that affect and are affected by its future planning. For example, state agencies make decisions about future transportation improvements on state highways. Public water suppliers are responsible for decisions about future water supply projects. The cities are responsible for making decisions about future development within the city limits. The Local Agency Formation Commission (LAFCO) is responsible for deciding when and if an area is annexed to a city or special district. As a result of these and other jurisdictional factors, many of the GP 2020 goals, objectives, and policies reflect these limitations on the County's authority and provide guidance for other agencies in making their decisions. Where the County does not have the decision making authority to require or mandate a policy or mitigation measure, terms such as "encourage", "support", or "request" are utilized in order to properly reflect the scope of the County's jurisdictional authority and the County's intent that the policy be implemented by the appropriate jurisdiction.

Master Response C
PROGRAM EIR/LEVEL OF DETAIL

Many comments question the level of detail and scope of analysis of the DEIR. Others request that the DEIR add more detailed analysis of the impacts of specific projects. As stated in the Introduction Section of the DEIR, the DEIR is a Program EIR under Section 15168 of the CEQA Guidelines and evaluates the environmental impacts of the proposed project on a general level rather than a project-specific level.

CEQA and the State CEQA Guidelines set out the different circumstances in which Program EIRs and Project EIRs are appropriate. (See Pub. Res. Code, §§ 21068.5, 21093.) Under Section 15168 of the CEQA Guidelines, a Program EIR is an EIR which may be prepared on a series of

actions that can be characterized as one large project and are related ... in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program. The CEQA Guidelines list some of the advantages of a Program EIR, including that it allows the Lead Agency to "consider broad policy alternatives and programwide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts. . . ." (CEQA Guidelines, § 15168(b)(4).)

The most common type of EIR is a Project EIR, which examines the environmental impact of a specific development project. "This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction and operation." (CEQA Guidelines, §15161.) A program level analysis for a General Plan, on the other hand, considers the future land uses and development that may occur over the lifetime of the General Plan and assesses the cumulative and associated long range impacts of those land uses and development. One of the primary purposes of a Program EIR is to ensure consideration of cumulative impacts that might be overlooked in a case-by-case analysis (see CEQA Guidelines, § 15168(b)). Thus, the Program EIR provides a framework within which future and more detailed planning for the future specific projects may be reviewed, and identifies areas that may require additional site-specific environmental analysis at subsequent stages of project implementation. CEQA Guidelines Section 15146 acknowledges that an EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy."

The GP 2020 EIR is intended to serve as a "first tier" CEQA document (Pub. Res. Code, § 21093; CEQA Guidelines, § 15152). First tier documents are general in scope and typically discuss broad environmental issues that affect a large geographic area, such as an entire county. Mitigation measures and alternatives are also correspondingly more general in nature than typical mitigation measures and alternatives for a specific development project. Subsequent environmental reviews are narrower in scope and address site specific details. First tier documents are appropriate for General Plan programs, while second and third tier reviews typically address specific plans and subdivisions, respectively. These subsequent documents will incorporate the GP2020 EIR by reference and add detailed analyses as necessary. If, however, the County finds that the proposed activity falls within the scope of activities set forth in the GP 2020 EIR, and that no new impacts would occur and no new mitigation measures would be required, then no additional CEQA analysis would be required (CEQA Guidelines, Section 15168(c)(2)). In preparing a first tier EIR, such as for a general plan, the lead agency must still identify the reasonably foreseeable significant environmental impacts of the proposed plan and may not defer analysis to a later tier document (CEQA Guidelines, § 15152(b)). However, the level of detail in a first tier EIR need not be greater than the level of detail in the plan being analyzed. (Ibid.)

Cumulative impacts are described in Section 6.2 (Cumulative Impacts) of the DEIR. As noted in that section, with respect to the cumulative impacts of growth and development that could occur under Draft GP 2020 in the unincorporated area of the County, the geographic area of concern is the unincorporated area. It is important to note that since cumulative development in the unincorporated area is incorporated into the project description and is the focus of the document's environmental impact analysis, the analyses under the various subject areas in the DEIR take account of the impacts of all future development within the unincorporated area of the County and is therefore by definition a cumulative impact analysis. In addition, where appropriate, the DEIR also analyzes the additional cumulative impact from development within the nine cities within the County; for most of this cumulative impact analysis, the geographic area of concern is the entire County. As noted on page 6.0-4 of the DEIR, there are also three specific development projects in various stages of entitlement that are not part of the proposed project, but would contribute to the

cumulative effects of future growth and development within the County; these are the Graton Rancheria Hotel and Casino, the Sonoma County Airport Master Plan, and the Sonoma State University Faculty Housing Project, which have been analyzed at a level of detail commensurate with available information. Consistent with CEQA, the discussion of cumulative impacts is guided by standards of practicality and reasonableness. The analysis of cumulative impacts is less detailed than in a project level EIR, corresponding to the level of detail of the plan itself (see CEQA Guidelines, § 15152, subd. (b)).

Master Response D
EFFECTIVENESS OF MITIGATION MEASURES

A General Plan consists of a series of goals, objectives, and policies that guide local jurisdictions such as Sonoma County in their future decisions regarding land use planning. The General Plan functions as a "constitution" or charter for future development. Unlike a physical development project, where mitigation measures usually consist of physical limitations on the construction or operation of the proposed project that reduce the project's environmental impacts, the mitigation measures for a General Plan consist of the plan's general statements of policy and future programs. This reflects the nature of the General Plan itself, which is a statement of policy to govern *future* regulations. The specific regulations that will implement the plan (such as those found in the County's Zoning Code) do not appear in the General Plan, but are developed to be consistent with its broad policy statements. The extent to which these policies and programs would reduce future environmental impacts, cannot be completely known until after the Plan is adopted. Often, the implementation of policies is in reaction to the actions of other jurisdictions or to private development applications. This difference is important to understand when an EIR evaluates how effective a policy or program will be in reducing the environmental impacts of the future land uses and development that are projected to occur over a fifteen or twenty year period.

Many comments question the adequacy of the DEIR's mitigation measures because the language of the policies and programs is not fully binding on County decision makers, or because the effectiveness of programs is often dependent upon uncertain future actions, funding, or staff resources. Comments frequently suggest that policies should use binding language such as "shall" or "require" rather than "may" or "encourage." The comments assert that policies that consist of non-binding language cannot be considered as mitigation measures. They also suggest that future programs cannot be counted as mitigation measures, because the timing and specific nature of the actions that will occur under the program are not fully known.

The DEIR preparers took these considerations into account as part of the analysis of the impacts of Draft GP 2020. The preparers of the DEIR recognized that General Plan policies had to be evaluated in light of the likelihood that they would reduce the applicable impacts over the course of the planning period, considering the level of certainty expressed in each policy. In addition, the General Plan programs had to be evaluated based upon the fact that the extent of the impact reduction that might result from the program could not be determined until it was completed. Following are the factors that were considered in judging the effectiveness of a policy or program as a mitigation measure.

Effectiveness of Policies: In this analysis, each policy included in Draft GP 2020 was assumed to be in effect for the entire period from the date of adoption until year 2020. This assumption is reasonable because the policies and programs are part of the project description that is being analyzed in the DEIR. In addition, to do otherwise would require a highly speculative forecasting of future decisions about program priorities. These priorities are typically selected over the course of the planning period and reflect not only the availability of resources, but also the results of ongoing and evolving public debate. However, the effectiveness of each policy in reducing the applicable

impact was weighed in light of the degree to which future land use and related decisions were bound by the policy. If a policy requires future land use decisions to meet defined environmental standards, then the policy was given relatively high credit for mitigation. However, if a policy encourages future land use decisions to meet the same standard, it was given relatively low credit for mitigation. For example, a policy requiring that 75% of the crops at an agricultural processing operation be locally grown in order to reduce conversion of farmland would be given more credit for mitigation than one which only encouraged locally grown produce.

However, even a binding requirement may not fully mitigate an environmental impact if the requirement does not apply to all future land use decisions. For example, a policy requiring that development projects reduce traffic impacts to a defined acceptable level of service would necessarily be limited to development that is subject to a discretionary review process. Development that may occur only through a ministerial process (e.g., a single family home) would not be affected by the proposed mitigating policy.

Another factor is related to the County's jurisdiction over future land use decisions. If a policy is intended to apply to development projects that are under the jurisdiction of a city or a special district, then the County cannot require that the other jurisdiction take action consistent with the policy. Rather, the appropriate approach is for the County to "encourage" or "support" the other jurisdiction in achieving compliance with the policy (see Master Response B (Jurisdiction)). For example, a GP 2020 policy that is intended to affect the way that water resources are utilized to meet future demand could not compel the city or district that develops and supplies the water to act accordingly. For example, Policy WR-3g calls for "assisting" public water suppliers in planning water supplies in accordance with the General Plan. As a result, such policies utilize non-binding language and are given relatively low credit for mitigating impacts.

Finally, some policies are intended to provide for flexibility in future implementation. Typically, the need for such flexibility is based upon economic or social factors that recognize that a binding policy may have unintended consequences or may not otherwise be in the best interest of the County. For example, policies that limit the processing of agricultural crops to a specific percentage of local production could reduce the impacts of agricultural processing facilities, but could also be difficult to enforce and would not recognize the typical seasonal variations in production cycles. As above, the flexibility incorporated into these policies means that they receive relatively lower credit for reducing impacts.

Effectiveness of Programs: While all Draft GP 2020 programs were assumed to be in effect prior to year 2020, none of them were assumed to be effective until some time after the adoption of the Plan. There are several reasons for this assumption. Many of the programs would take at least several years to complete, particularly those that would involve significant public participation in their implementation. In addition, the financial constraints of the County's future budgets, and the uncertainty of state and federal funding sources, can often delay program implementation. Finally, even those programs that can be given a high priority for completion and can likely obtain the necessary funding and staff resources may not achieve the desired mitigation due to the uncertainty of the outcome, as described at the beginning of this master response. For all of these reasons, future programs are given relatively low credit for mitigating environmental impacts.

Some comments assert that DEIR mitigation measures aren't "fully enforceable" as required by CEQA because of the uncertainty of their implementation. However, enforcing mitigation measures in a program level EIR for a general plan is different than enforcing mitigation measures for a specific development project. Under CEQA and the State CEQA Guidelines, mitigation measures for a program level EIR prepared for a general plan are considered "fully enforceable" if they are incorporated into the plan itself as policies (see Pub. Res. Code, § 21081.6 (b); CEQA Guidelines, §

15126.4(a)(2)). The mitigation measures identified in the EIR and approved by the Board of Supervisors will be incorporated into GP 2020 as policies unless they are found to be infeasible. As noted above, the uncertainty of implementation affects the determination of whether a particular impact is reduced to less than significant, rather than the enforceability of the mitigation measure.

In conclusion, where there is some uncertainty whether Draft GP 2020 policies and programs would effectively reduce impacts to less than significant, the DEIR concluded that impacts remained significant and unavoidable. This explains in part why so many of the impacts identified in the document are concluded to be significant and unavoidable despite identification of mitigating policies. As required by CEQA, when the Board of Supervisors approves GP 2020, the Board is required to make findings that any mitigation measures that could reduce or avoid these significant impacts but are deemed undesirable for economic, social, or other reasons, are infeasible and adopt a statement of overriding considerations before approving the plan. (See Pub. Res. Code, § 21081; CEQA Guidelines, § 15091.)

Master Response E
EXTENT OF SIGNFICANT IMPACTS

Many comments criticize the Draft GP 2020 and its DEIR for the number of significant unavoidable impacts. These comments typically state that Draft GP 2020 should not be adopted with so many impacts that remain significant and unavoidable and that there must be additional mitigation measures (in the form of new or revised policies and programs) that can be identified and incorporated into the Plan. To the extent comments have suggested additional feasible mitigation measures, these are recommended for incorporation into Draft GP 2020. However, there are several reasons why the DEIR concludes that Draft GP 2020 would result in numerous significant unavoidable impacts.

A General Plan provides only a limited ability to mitigate the impacts of all future land uses and development that could take place within its geographic area. As a general policy document, it cannot always predict the specific projects that might be proposed by cities, special districts, and other public agencies. In some cases these other jurisdictions may not have planned all of their future facilities and uses. In other cases, the jurisdictions may be planning facilities but have not informed the County of their plans

Many land use decisions that result in new impacts in the unincorporated area are made by the cities in the approval of land uses and development projects within their own boundaries. Many decisions to build public service and infrastructure projects in the unincorporated area to serve city growth are made by the cities. Many decisions to build public service and infrastructure projects to serve county growth are made by special districts.

These land use decisions are not under the jurisdiction of the County. Cities and special districts, as lead agencies for the projects, would be responsible for conducting environmental review and identifying and adopting mitigation measures. If a project also required some type of discretionary approval from the County, the County's role would be limited to that of a responsible agency, with authority only to mitigate the impacts "of those parts of the project which it decides to carry out, finance, or approve." (CEQA Guidelines, § 15096(g)(1).) If no further discretionary approval from the County is required, the County's role would be limited to commenting on the other agency's environmental document if it is submitted to the County. In some cases, the County would not be notified of the pending city or special district approval and would have no role in the process. The DEIR recognizes that these projects will occur and includes them in its countywide impact assessment, but only at a general level of detail reflective of the unpredictability of the location and nature of the projects. In any case, the DEIR's conclusions are based, in part, upon the County's

inability to assure mitigation for the impacts of these projects.

In addition, not all land uses and development are subject to discretionary review under CEQA that would enable impacts to be reduced at the project level. These include land uses and development that are permitted outright and are not subject to any permit review process. They also include projects that are subject only to ministerial review. To the extent that comments have suggested that discretionary review be required for some of these projects, the response to the individual comment either includes a recommended policy change or explains why a change is infeasible.

The countywide nature of the General Plan and its companion Program EIR limits the ability of the DEIR to analyze and disclose the existing environmental conditions in any detail. If the project being analyzed in the DEIR were a specific project on a single parcel of land, for example, the property's existing environmental conditions could be studied in detail, enabling a detailed and accurate analysis of project-induced changes; any missing information could be studied in a relatively short time. In a countywide context, however, some environmental conditions are unknown and cannot be known without years of detailed study. For example, a full understanding of the nature and extent of all of the county's water and biological resources cannot be developed in a reasonable and feasible time frame for the completion of the General Plan Update. The Draft GP 2020 calls for this type of information to be developed to inform the future regulations that will be adopted to implement the plan, but discusses these resources at a broad level of generality consistent with the nature of the plan being analyzed. See Master Response C (Program EIR and Level of Detail). In light of this limitation, the DEIR takes a very conservative approach to its analysis and concludes that impacts whose significance cannot accurately be determined are significant and unavoidable.

The Draft GP 2020 Work Plan recommended by the Citizen's Advisory Committee and approved by the Board of Supervisors was limited to a policy review of the existing General Plan. As noted in the discussion of Project Objectives on page #3.0-9 of the DEIR, this decision was made following extensive public input and reflected the widely-held sentiment that the existing General Plan was functioning well as the County's land use guide. Accordingly, from the outset, the fundamental objective of the project was to address a limited number of specific policy issues while maintaining the land use maps and major goals of the current plan. This limitation on the scope of the project to some extent limits the available options for reducing the impacts of Draft GP 2020 to new or amended policies and programs, rather than significant changes to the land use maps.

For the above reasons, the DEIR's conclusion that a substantial number of the impacts of Draft GP 2020 are significant and unavoidable is not only justified and reasonable, but consistent with the letter and spirit of CEQA. The DEIR's acknowledgment of these impacts is an important aspect of full disclosure of the impacts of future land uses and development that could occur under Draft GP 2020. It should also be noted that new or revised policies and programs identified in the comments on the DEIR have been presented for consideration to the Planning Commission and Board of Supervisors. As noted in Master Response I (Feasibility of Mitigation Measures), the responses to specific suggested mitigation measures include an evaluation of the feasibility of the measure and whether or not it meets the basic project objectives of Draft GP 2020.

Master Response F
EXPLANATION FOR LACK OF MITIGATION MEASURES

Several comments criticized the DEIR for failing to adequately explain why new or revised policies that would reduce the impacts of Draft GP 2020 were not included in the DEIR. These comments state that CEQA requires an EIR to provide the rationale for not including potential mitigation measures. There are several reasons for the approach taken by the preparers of the DEIR, as discussed below.

In some instances, the DEIR concludes the discussion of a particular impact with the following statement: "No mitigation available beyond the Draft GP 2020 policies discussed in the impact analysis." This conclusion reflects the judgment of the DEIR preparers that all appropriate and feasible mitigation measures have already been included in Draft GP 2020 as policies. For example, with respect to Impact #4.1-2, the DEIR concludes that the policies proposed in Draft GP 2020 will reduce the potential conflicts between agricultural and residential/urban uses to the extent feasible. These policies, which are discussed on pages #4.1-37 through #4.1-39 of the DEIR, limit the potential for land use conflicts by, among other things, reducing the intrusion of residential uses into agricultural areas and stabilizing the urban fringe. It is the opinion of the DEIR preparers that no additional feasible mitigation measures are available that would further reduce those conflicts. To the extent any additional policies have been identified in comments on the DEIR that are feasible and will further reduce an impact, those policies are recommended in this FEIR for consideration by the County decision makers.

In other instances, the DEIR proposes new policy language, in addition to the policies already in Draft GP 2020, that in the opinion of the EIR preparers will further reduce an impact, but still not to a level of insignificance. For example, following the analysis of traffic congestion impacts #4.2-1, #4.2-2, and #4.2-3, the DEIR proposes additional policies to further reduce the identified impact but concludes that the impact cannot be reduced to less than significant. This conclusion reflects the fact that the activities that generate the impacts are not always under the control of the County (e.g., city-generated traffic on county roads) or that an agency other than the County has jurisdiction to implement the necessary improvements to reduce the impact to less than significant (e.g., Caltrans' jurisdiction over state highways). (See also Master Response B (Jurisdiction).)

In some cases, the DEIR concludes that further study is needed before it can be known what the full extent of the impact is and whether additional mitigation is necessary and feasible. For example, the DEIR notes the many policies in the new Water Resources Element that will provide a better understanding of the varying groundwater conditions throughout the County and require greater oversight of future uses of groundwater, but concludes there is insufficient information at this time to determine whether more stringent mitigation is justified and the proper scope of such mitigation. Accordingly, the DEIR conservatively concludes that the impact on groundwater resources is significant and unavoidable, noting that requiring regulation of groundwater usage without well established evidence to justify the regulation could run afoul of the individual water rights of overlying users.

In other cases, the only available mitigation measure is one that the DEIR preparers have determined to be infeasible. For example, following the discussion of Impact #4.5-3, the DEIR concludes that there will be a significant and unavoidable impact to downstream waterways resulting from increases in sediment and nutrients from agricultural and resource development. With respect to the impact from agriculture, the DEIR first notes the new policies proposed in Draft GP 2020 to reduce water quality degradation from agricultural operations. At the same time, the

DEIR recognizes that subjecting agricultural operations to discretionary permit requirements could further reduce water quality impacts, but also may render agriculture in the County economically unviable, resulting in other environmental impacts such as loss of agricultural land.

Some comments questioned why the rationale for not including a particular mitigation measure – such as a policy requiring discretionary permits for agricultural operations – was not provided in the DEIR itself. However, CEQA does not require that the environmental document itself explain why a mitigation measure has not been included in the project. Instead, the rationale for not adopting the mitigation measure is properly identified in findings that the legislative body (in this case the Board of Supervisors) makes at the time it decides whether or not to approve the project, as set forth in Public Resources Code section 21081, subdivision (a)(3) (see also CEQA Guidelines, § 15091(a)(3)). Mitigation measures that are not adopted by the Lead Agency must be identified in the findings for approval of the project, along with the reasons why the Lead Agency finds them to be infeasible. A mitigation measure may be infeasible if it is not "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors" (CEQA Guidelines, § 15364). If impacts will still occur after all feasible mitigation measures have been included, then the Lead Agency must adopt a Statement of Overriding Considerations under Section 15093 of the CEQA Guidelines. A Statement of Overriding Considerations meeting CEQA requirements will be adopted as part of the approval of Draft GP 2020.

In summary, the preparers of the DEIR included all of the feasible mitigation measures that were known to them. However, throughout the DEIR comments, reviewers have suggested additional policies or programs that they believe could be included in order to reduce the impacts of Draft GP 2020. All of these comments have been forwarded to the decision making bodies for consideration. In addition, responses to each of these comments are provided in this Final EIR, including whether or not the suggested measures are likely to be feasible or effective and whether or not they fit within the Project Objectives of a limited policy review of the existing General Plan. See also Master Response L (Extent of Significant Impacts).

Master Response G
RECIRCULATION

Many comments on the DEIR contend that it is deficient and must be recirculated following extensive revision. The most commonly cited reasons for these proposed deficiencies are errors and omissions, infeasible mitigation measures, and lack of a stable project description. These specific comments have been addressed in the individual and master responses in this FEIR and where necessary, revisions to the DEIR have been prepared. However, after review of the revisions to the DEIR and all the comments requesting recirculation, recirculation of the DEIR is not required under CEQA.

The criteria for recirculation of an EIR prior to certification are set forth in CEQA Guidelines Section 15088.5:

> a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the

project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:

> (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
>
> (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
>
> (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
>
> (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (Mountain Lion Coalition v. Fish *and Game Com.* (1989) 214 Cal.App.3d 1043)

(b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

Court decisions on recirculation confirm that the standard for recirculation under CEQA is stringent, and recirculation is not required when any arguably significant new information is added to an EIR. (*Laurel Heights Improvement Ass'n ("Laurel Heights II") v. Regents of Univ. of Cal.* (1993) 6 Cal. 4th 1112). Instead, recirculation is only required when the addition of new information to a DEIR "deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement." (*Laurel Heights II*, 6 Cal. 4th at p. 1129). As the Supreme Court made clear, the Legislature's adoption of the requirement that an EIR be recirculated when "significant new information" is added to an EIR was not intended "to promote endless rounds of revision and recirculation of EIR's. Recirculation was intended to be the exception, rather than the general rule." (*Id.,* at p. 1132.)

Review of the comments, responses, and corresponding revisions to the DEIR indicates that recirculation of the DEIR is not warranted at this point. There were numerous comments made on the DEIR, often asking for additional information or further explanation of the document's conclusions. Information provided in response to those comments clarifies and amplifies the analysis presented in the DEIR. However, no significant information was added to the EIR that would trigger recirculation under CEQA. Specifically, there are no new significant environmental impacts, or a substantial increase in the severity of any impact, that would result from the project or the EIR mitigation measures that were not already identified in the DEIR. Furthermore, there are no new feasible alternatives or mitigation measures considerably different from others previously analyzed in the DEIR that would clearly lessen the environmental impacts of the project, but which have not been incorporated into the Final EIR. Finally, the DEIR was not so fundamentally and basically inadequate and conclusory in nature that meaningful public review was precluded. Rather, the document represents a good faith effort to comply with the disclosure requirements of CEQA. See CEQA Guidelines §15141,

Some comments suggested the project description will likely change following the hearings by the Planning Commission and Board of Supervisors and the EIR will therefore need to be recirculated. The proposed project, as described in Section 3.0 of the DEIR is the adoption of goals, objectives, and policies to establish planning goals and guide future development for Sonoma County through 2020. The project, identified as the Public Hearing Draft GP 2020, is based upon the policies and programs for a predetermined list of issues approved by the Board of Supervisors as part of the GP 2020 Work Plan (see DEIR page #3.0-10). That is the project described and analyzed throughout the DEIR. The DEIR informs decision makers and the public about the environmental consequences of these proposed policies by identifying and analyzing their secondary impacts, that is, the impacts of the land uses and development that will occur under the proposed plan. In addition, through the alternatives analysis, the DEIR also informs decision makers about the impacts that would occur from choosing policy alternatives other than those proposed in Draft GP 2020. See Master Response Q (Range of Alternatives). Decision makers may choose among these identified policy options over the course of the GP 2020 hearing process without triggering recirculation, because the impacts of these policy options are already disclosed in the DEIR.

It should be noted that the decision making bodies' concurrent consideration of the DEIR with the proposed Draft GP 2020 follows the recommendation of the General Plan Guidelines published by the Governor's Office of Planning and Research. As recommended in the Guidelines, the DEIR anticipates that changes may be made in the plan as it moves forward and include those as policy alternatives in the DEIR's analysis in Section 5.0 (Alternatives). The selection of a policy option identified in one of the alternatives analyzed in the DEIR does not render the "project description" inadequate or unstable. Indeed, one of the intended purposes of an EIR is to provide decision makers with alternatives that may reduce some of the environmental impacts of the proposed project while still meeting basic project objectives. If the Board of Supervisors elects to adopt a policy substantially different from any of those analyzed in the DEIR, the determination would have to be made at that point whether the policy would require revisions to the EIR that would trigger recirculation under CEQA Guidelines Section 15088.5. However, as explained above, none of the revisions proposed to be made to the DEIR in response to comments received on the DEIR require recirculation.

Master Response H
RANGE OF ALTERNATIVES

A number of comments criticized the DEIR for not providing a wider array of alternatives, particularly alternatives that would further reduce the environmental impacts of Draft GP 2020. Some comments also questioned whether the DEIR alternatives identified the full range of development potential allowed by Draft GP 2020. .

As noted in Master Response C (Program EIR/ Level of Detail), the DEIR is a Program EIR under CEQA. The Draft GP 2020 sets forth broad goals, objectives, and policies that will guide land use decisions through year 2020. Further, as noted in the DEIR on page #3.0-9, the Project Objectives of the update of the General Plan are limited to a policy review of selected topics or issues. This policy review was specifically limited by the County Board of Supervisors, following extensive input from the general public and the Citizens' Advisory Committee, to not include significant changes to land use designations and zoning. The decision to retain the land use maps and major goals of the current General Plan reflected strong support for the existing plan as the County's land use guide.

See also Master Response L (Extent of Significant Impacts) and Master Response S (Land Use Changes).

This limitation affects the range of alternatives that are analyzed in the DEIR. As noted by a leading CEQA commentator, "the basic purpose of an EIR's discussion of alternatives is to suggest ways project objectives might be achieved at less environmental cost." Accordingly, an EIR need not present alternatives that are incompatible with fundamental project objectives or change the basic nature of the project. (Kostka & Zischke, Practice under the California Environmental Quality Act (CEB, pp. 736-737.) The alternatives to Draft GP 2020 selected for analysis in the DEIR also consist of policy options and do not include significant changes to the land use maps.

As described in Section 5.0 (Alternatives) of the DEIR, there are three alternatives identified and analyzed. The mandatory No Project Alternative identifies the impacts of the County continuing forward under the current General Plan. The Buildout Alternative identifies the impacts of a greater level of land uses and development than projected under Draft GP 2020, with this increased development taking place under less restrictive policies than under Draft GP 2020. The Mitigated Alternative identifies the impacts of a lesser level of land uses and development than under Draft GP 2020, primarily as a consequence of more restrictive policies than under Draft GP 2020.

As more fully explained in Master Response S (Land Use Changes), all alternatives utilize the same land use designations and zoning as Draft GP 2020. Section 5.1 (Description of Alternatives) of the DEIR provides a list of the policy variations that are included in each of the three alternatives as well as the proposed project. Following are key points on which the three alternatives differ.

No Project Alternative: This alternative assumes that the current General Plan, including its land use maps, will remain in effect. Since the land use maps are virtually identical to those under Draft GP 2020, the projected population, households, and jobs are the same.

The Buildout Alternative: The Buildout Alternative assumes a level of growth and development that is significantly greater than under Draft GP2020. As described on pages #5.0-1 through #5.0-12 of the DEIR, year 2020 population, households, and jobs are higher (see Exhibit #5.0-1). The extent of vineyard planting is also considerably higher. This alternative also assumes the following increased land uses and development compared to Draft GP 2020:

- A larger inventory of affordable housing sites to implement the Housing Element
- More places of religious worship and schools in rural areas due the less restrictive siting policies for these uses
- More resorts and hotels in rural areas due to less restrictive siting policies for these uses
- More agricultural cultivation and agricultural processing due to less restrictions on cultivation
- More agricultural tourism due to less restrictive policies regarding visitor serving uses and more agricultural cultivation
- More timber conversions due to less restrictive conversion policies
- More certificates of compliance due to less restrictive requirements
- Increased expansion of Urban Service Boundaries

Also, due to the fact that less restrictive land use and development policies are assumed under this alternative, all land uses and development would be more likely to occur. For example, reduced streamside conservation zones and less restrictive use of package treatment plants are assumed under this alternative. Therefore, the DEIR, in fact, identifies the buildout potential of Draft GP 2020 as described in Master Response K (Buildout) and thus provides a "worst case" alternative. Not only does the Buildout Alternative result in a greater number of significant unavoidable impacts, its impacts are of greater significance than under Draft GP 2020 (See Exhibit #5.0-2). It should also be noted that, by virtue of its analysis of a level of development that exceeds the project, this alternative provides a de facto analysis of the impacts of growth after 2020. This is due to the fact that the land use maps provide a cap on the level of growth, even if the rate of growth occurs more slowly than projected.

The Mitigated Alternative: The Mitigated Alternative assumes a level of growth and development that is less than under the project due to the implementation of policies that are more restrictive than the proposed project. Although projected population, households, and employment are the same as Draft GP 2020, other types of development are reduced, as noted on pages #5.0-1 through #5.0-12. Following are additional examples of reduced development assumptions under this alternative:

- Smaller inventory of affordable housing sites to implement the Housing Element
- Schools and places of religious worship prohibited in rural areas
- Permanent occupancy of RV parks and campgrounds would be prohibited
- Less agricultural cultivation and fewer related agricultural support uses due to greater restrictions on cultivation near streams and in habitat areas and greater limits on processing
- Less agricultural tourism due to reduced cultivation and processing
- Less timber conversions due to more restrictive conversion policies
- No expansion of water and sewer capacity

Through the Mitigated Alternative, the DEIR provides County decision makers with policy options that would further reduce the impacts of the proposed project. Due to the fact that more restrictive land use and development policies would apply under this alternative, many land uses and developments would be less likely to be approved. As a result, not only does the Mitigated Alternative result in a lower number of significant unavoidable impacts, most of its impacts are of lesser significance in comparison to the impacts of the Draft GP 2020.

Exhibit 5.0-2 (Comparison of Alternatives) beginning on page 5.0-12 of the DEIR provides a side-by-side comparison of the impacts of each of the three alternatives relative to Draft GP 2020.

Master Response I
LAND USE CHANGES

A number of comments pertained to the land use map designations, both in terms of defining the future land uses and development under the Draft GP 2020 and the potential for reducing the impacts by revising the land use designations. Following are the land use map related issues raised by these comments:

- The level of development under Draft GP 2020 is not adequately defined in the DEIR.

- There do not appear to be adequate policy guarantees in place in Draft GP 2020 to ensure that future land uses and development would be limited to what is projected in the Plan.

- Land use map amendments are not utilized to reduce Draft GP 2020 impacts where the impacts are determined in the DEIR to be significant and unavoidable.

Draft GP 2020 Land Uses and Development: The level of development allowed by the project is defined by the land use maps for the nine Planning Areas (Figures LU-2a through LU-2i) in Draft GP 2020. These land use maps reflect the basic land use policy framework of the current General Plan, which is continued and expanded upon in Draft GP 2020. This policy framework and its rationale are explained in depth in Section 2 of the Draft GP 2020 Land Use Element. The land use maps are the primary implementation tool utilized to carry out the eleven general goals listed in Section 2.1. The projected population, housing, and employment growth is shown in Tables LU-2, LU-5, and LU-6 in the Draft GP 2020 Land Use Element. The projected housing and population growth is shown in Exhibits #3.0-4 and #4.1-4 of the DEIR. The land use map for each of the Planning Areas shows the location and distribution of the 2020 growth in terms of residential density, agriculture, and commercial and industrial land uses. The difference between the existing and future level of development is the basis for the impact analysis in the topical sections of the DEIR. The Planning Area level of detail provided in the General Plan and in the DEIR is of sufficient detail for an understanding of the location and extent of future growth for an impact analysis at a countywide level of detail.

Several comments suggest that more development is possible than what is projected in Draft GP 2020 or analyzed in the DEIR. These comments are correct with respect to the Draft GP 2020, but not correct with respect to the DEIR. The proposed land use maps can theoretically accommodate more population, housing, and employment growth than is projected to occur. That is due to the fact that not every parcel of land is likely to be developed by year 2020. Environmental constraints, lack of services or infrastructure, economic considerations, and property owner desires can result in less development than theoretically possible. In any case, the DEIR evaluates the impacts of both projected growth and the theoretical holding capacity (buildout). See Master Response K (Buildout) for more information on the Buildout Alternative.

Guaranteed Limits on Future Land Uses and Development: The land use maps establish the location and density of land uses and development allowed under Draft GP 2020. This level of future growth cannot be exceeded without a change in the land use maps through future map amendments approved by the Board of Supervisors through the General Plan Amendment process. The Draft GP 2020 is based upon a projected level of growth that can reasonably be predicted and accommodated. While it is theoretically possible that a level of growth could occur that is slightly greater than projected, it is not likely given the circumstances identified above. Nonetheless, the DEIR analyzes the impacts of a greater level of development in Section 5.0 (Alternatives) under the Buildout Alternative. Therefore, additional numerical limits on the number of subdivisions, use permits, or other land use entitlements are unnecessary in order to cap growth. In the event that more restrictive limits on future growth are necessary in the future in order to respond to a threat to public health or safety, Draft GP 2020 includes policies that would enable the County decision makers to do so. For example, Policy LU-1g allows zoning to be used to improve the balance between jobs and housing. Policy WR-3i provides for consideration of moratoria on entitlements if water supplies are not available. These and other policies are the appropriate mechanism to

reduce the impacts of growth where the need is substantiated and legally justified.

Revised Land Use Designations to Reduce Draft GP 2020 Impacts: From the outset, the scope of the General Plan Update was clearly defined by the County as a Policy Review focused on specific policy issues that had arisen since the adoption of the existing General Plan in 1989. At community meetings held throughout the County prior to approval of the final Work Plan by the Board of Supervisors, the public expressed support for retaining the land use map designations in the existing Plan. In fact, based in part upon this community support, the Board of Supervisors approved a set of screening criteria that would limit the land use amendments that would be considered during the update process.

For this reason, the Project Objectives were defined in the Work Plan and, consequently, in the DEIR in Section 3.2 (Project Objectives and History), to exclude most land use map amendments. As described on pages #4.1-10 and #4.1-11 of the DEIR, land use map amendments are only considered if they serve a public purpose and if they meet one or more of the following additional criteria:

1. The changes are necessary to address one of the policy issues identified in the Final GP 2020 Work Plan.

2. The changes are needed to address a technical correction or non-conforming use.

3. The changes are needed for concurrence with a change in GP 2020 policy.

4. The changes involve a public facility or use of substantial public benefit.

These limitations affect the DEIR in two ways. First they affect the alternatives analysis by limiting the range of alternatives (see Master Response Q (Range of Alternatives)). Second, they affect the availability of land use amendments for mitigation of the impacts of Draft GP 2020. See also Master Response L (Extent of Significant Impacts).

With respect to comments suggesting reductions in the allowed residential density of the Draft GP 2020 Land Use Maps, such changes would reduce the housing opportunities available to very low, low, and moderate income households. Sonoma County, as is the case with all local jurisdictions in California, is required to demonstrate that an adequate inventory of sites is available to meet its housing needs established in the General Plan Housing Element, certified by the California Department of Housing and Community Development in 2002. The County has recently undergone a comprehensive review of its inventory in order to confirm its adequacy under State law. While the inventory has been confirmed to be adequate, there are not enough surplus sites that are available and zoned for housing for the County to consider density reductions as a means of reducing the impacts of Draft GP 2020. Similarly, reductions in potential agricultural, commercial, and industrial designations and zoning are also infeasible inasmuch as the loss of future employment opportunities would have a secondary effect on the potential for residential growth due to the need to maintain a favorable balance between jobs and housing. As a result, the loss of employment opportunities would also reduce the likelihood that the County could meet its affordable housing obligations.

Master Response J

BUILDOUT

A number of comments objected to the project description for Draft GP 2020 on the grounds that it does not identify the full land use and development potential allowed by Draft GP 2020. The comments contend that the failure to conduct a "worst case analysis" resulted in an understatement of the severity of the impacts that would result and a failure to identify sufficient mitigation measures to reduce these impacts. Comments also criticized related aspects of the DEIR, such as the lack of analysis of Draft GP 2020 impacts after year 2020, the lack of parcel specific information about the location of future development, and the lack of a comparison of the amount of development under Draft GP 2020 with that allowed by the current General Plan.

Contrary to these comments, the DEIR not only identifies and analyzes the impacts of the projected growth and development that will occur under Draft GP 2020, but also identifies and analyzes the impacts of the theoretical buildout of the Draft GP 2020.

Projected Growth:

As noted on page #3.0-14 of the DEIR, the Draft GP 2020 is based on a projected amount of growth and does *not* assume that all parcels would be fully developed. Projected growth is described in several sections of the DEIR. Section 2.1 (Proposed Project) explains that the Draft GP 2020 accommodates the projected level of population, housing, and employment anticipated through the year 2020. Section 3.3 (Project Objectives and History) describes the limitations of Draft GP 2020 on land use changes and the projected growth in more detail. The above sections of the DEIR utilize the growth projections identified in the Draft GP 2020 Land Use Element. These growth projections serve as the basis for the identification and analysis of the impacts of the proposed plan.

It is important to note that for any General Plan to be meet the internal consistency requirements under state law as provided in Government Code Section 65300.5, the Land Use Maps must provide enough land use and development capacity for the projected growth to be accommodated. In a rural county like Sonoma County, this means that the Land Use Maps must actually provide additional capacity for growth beyond the minimum needed to accommodate the projections. Ideally, this additional capacity is as close as possible to projected growth. Draft GP 2020 Policies LU-2a and LU-3b express this concept. This additional capacity is necessary because many factors will prevent the theoretical buildout to be reached, including environmental conditions, infrastructure, public services, economics, property owner desires, and other constraints prohibiting some properties from being developed at the maximum level allowed. In other words, even with this additional capacity, the full buildout of the Land Use Maps is not likely to be reached either during or after the planning period. Two examples of this limitation on growth are the natural limitations on the capacity of Sonoma County soils to accommodate standard septic systems and the fiscal constraints on the County budget to pay for sewer systems in existing developed communities, such as Monte Rio. In any case, as noted on page #2.0-2 of the DEIR, the analysis of the potential impacts of Draft GP 2020 is based on projected growth, not the theoretical buildout of all land use designations. See also Master Response S (Land Use Changes).

Contrary to some comments, CEQA does not require a "worst case" analysis of a general plan's potential impacts. Rather, "[t]he purpose of an EIR is to provide public agencies and the public in general with detailed information about the effect which a proposed project *is likely to have* on the environment. . . ." (Pub. Res. Code, § 21061 [emphasis added].) CEQA further defines "project" as "an activity which may cause either a direct physical change in the environment, or a *reasonably foreseeable* indirect physical change in the environment" (Pub. Res. Code, § 21065 [emphasis added].) Preparation of an EIR to evaluate a project's impacts is subject to a "rule of reason". The goal is to provide decision makers with sufficient information "to enable them to make a decision

which intelligently takes account of environmental consequences." (CEQA Guidelines, § 15151.) Accordingly, analysis of project impacts that are highly unlikely to occur is not required.

In analyzing the potential impacts of Draft GP 2020, the DEIR properly considered the reasonably foreseeable impacts of the growth and development that would likely occur as a result of the plan. At the same time, the DEIR recognizes that a discussion of the impacts that would occur with less restrictive policies than those proposed in the Draft GP 2020 would be useful for both the public and county decision makers. As a result, the DEIR includes an alternative which assumes a greater level of development than is anticipated under the proposed project. This alternative is the "Buildout Alternative" in Section 5.0 (Alternatives).

Buildout:

The level of growth under this alternative is described in Section 5.1 (Descriptions of Alternatives) of the DEIR, particularly in Exhibit #5.0-1. The higher level of land uses and development in this alternative emanate from the policy options that could result in additional development. The policy options that are assumed under this alternative are generally less restrictive to proposed land uses and development. These policy options may thus enable slightly more residential, commercial, industrial, and agricultural uses to occur during the planning period. The fact that the growth under the Buildout Alternative is only slightly more than under Draft GP 2020 is due to the limitations on land use map amendments described in the Project Objectives and further elaborated in Master Response S (Land Use Changes). See also Master Response Q (Range of Alternatives).

The Buildout Alternative not only provides County decision makers with an environmental analysis that reveals the impacts of the less restrictive policy options before them, it also provides a "de facto" analysis of the impact of growth after 2020 due to the fact that the land use maps act as a cap on future growth even if the rate of growth is slower than projected and projected growth occurs after 2020. DEIR Exhibit #5.0-2 (Comparison of Alternatives) provides a comparison of the relative impacts of this alternative and the impacts of the proposed project.

Some comments suggested that it is necessary for the DEIR to identify the exact locations where additional growth would take place, and to include the full development potential of every parcel of land that could be created. For residential, commercial, and industrial uses, the specific locations are shown on the Draft GP 2020 Land Use Maps by the specific land use designations on each parcel of land. This includes the higher densities allowed in urban areas as well as the relatively low densities in rural areas. Residential uses include all lands that show residential density, including agricultural and resource lands. Future growth projected to occur on residential lands reflect assumptions regarding second units, farmworker housing, and other units that are allowed in addition to the primary units allowed by density. However, the specific sites where these latter uses might be proposed are unknown at the parcel level of detail.

Future growth of agricultural uses cannot be accurately predicted solely from the Land Use Maps. Agricultural cultivation is allowed in almost every land use category. Agricultural support uses and visitor serving uses are assumed to occur on agricultural lands, but not every parcel on agricultural and resource lands will be occupied by these uses. Analysis of "buildout" of these uses based upon the assumption that every parcel will be occupied by a winery or a bed and breakfast inn or similar uses, as requested by some comments, is unrealistic, both economically and physically. This level of use "saturation" has never occurred in Sonoma County, Napa County, or any other place known to the preparers of the DEIR. As a result, the DEIR assumes a smaller, more realistic increase in the level of production and related uses as noted above. Similarly, it is unrealistic and unnecessarily speculative for the DEIR to analyze a higher level of city growth than is planned by the cities, as reflected in their adopted general plans.

Section 5.0 (Alternatives) of the DEIR provides a summary description of the three alternatives. Following that description is a comparison of the impacts of the Buildout Alternative to the impacts of the Draft GP 2020. Under the column entitled "BOA Comp" is a symbol which indicates whether the impact of the Buildout Alternative is greater than (>), less than (<), or the same as (-) the impact of Draft GP 2020. As noted in Master Response C (Program EIR/Level of Detail), this level of analysis is appropriate for a Program EIR for a General Plan.

Master Response K
AGRICULTURAL TRAFFIC

Some comments stated that the DEIR did not adequately identify or analyze the weekend traffic congestion generated by wineries, tasting rooms, special events and other forms of agricultural tourism.

The Sonoma County Traffic Model (SCTM) is a computer based tool used in the DEIR to forecast future traffic congestion. The SCTM is comprised of three basic components:

(1) Spatial representation of the road network,

(2) Demographic and land use data, and

(3) Mathematical formulae to estimate, distribute, and predict future trips.

The accuracy of the SCTM is affected by both the quality of data and the ability to mathematically describe how trip choices will be influenced. Weekend trips represent an unusual challenge because drivers have considerable flexibility on choosing routes, time of travel and destination, as contrasted with the relatively inflexible weekday commute to and from work. Additionally, weather, time of year, and marketing will influence destination choices and time of travel for tourists, making it difficult to construct a mathematical model capable of generating a consistently accurate prediction of the future weekend traffic patterns.

However, the DEIR did include weekend congestion impacts in its discussion in Section 4.2 (Transportation), under Impacts #4.2-1 through #4.2-4. Traffic modeling conducted for Draft GP 2020 and the DEIR contains estimated PM peak hour volume for both weekend and weekday traffic volume and level of service (LOS). Weekend traffic projections for County roads are found in twelve columns on the right side of third and fourth pages of Exhibit #7.6-2 in Appendix #7.6 (Transportation). Road names are shown only on the first two pages of this exhibit, making it difficult to read the table. To provide clarity, Exhibit #7.6-2 is reformatted and revised to include road names at the beginning of rows on all pages. Weekend LOS data for roads where weekend traffic is greater than weekday traffic have been excerpted from Exhibit #7.6-2, and are shown in the table below. This table also shows existing weekend traffic LOS, which was not included as part of Exhibit #7.6-2.

		2001 Existing Conditions (Weekend)		Draft GP 2020 (Weekday)		Draft GP 2020 (Weekend)	
Road Segment	Weekend Weekday Ratio	North East LOS	South West LOS	North East LOS	South West LOS	North East LOS	South West LOS
Agua Caliente Road E/ Arnold Drive	1.1	A	A	A	A	A	A
Alexander Valley Road W/ Lytton Stn Road	1.3	A	A	A	A	A	A

		2001 Existing Conditions (Weekend)		Draft GP 2020 (Weekday)		Draft GP 2020 (Weekend)	
Road Segment	Weekend Weekday Ratio	North East LOS	South West LOS	North East LOS	South West LOS	North East LOS	South West LOS
Arnold Drive W/ S.H. 12 (Glen Ellen)	1.1	A	A	A	A	A	A
Bennett Valley Road W/ Grange Road	1.3	A	A	C	B	E	C
Bodega Avenue W/ Thompson Lane	1.4	A	A	A	A	A	B
Bodega Highway W/ Watertrough Road	1.13	A	A	A	A	A	A
Bohemian Highway N/ Freestone Flat Road	1.13	A	A	A	A	A	A
Chileno Valley Road W/ Spring Hill Road	1.3	A	A	A	A	A	A
Crocker Road W/ River Road	1.2	A	A	A	A	A	A
D Street S/ San Antonio Road	1.1	A	A	A	A	A	A
Dry Creek Road N/ Lambert Bridge Road	2	A	A	A	A	A	A
Eastside Road N/ Trenton-Healdsburg Road	1.2	A	A	A	A	A	A
Eighth Street East N/ S.H 12/ 121	1.1	A	A	A	A	A	A
Eighth Street East S/ East Napa Street	1.1	A	A	A	A	A	A
Graton Road W/ Green Hill Road	1.13	A	A	A	A	A	A
Leveroni Road E/ Arnold Drive	1.1	A	A	A	A	A	A
Mecham Road S/ Dump	1.1	A	A	A	A	A	A
Mirabel Road S/ Trenton Road	1.2	A	A	A	A	A	A
Old Redwood Highway N/ Eastside Road	1.1	A	A	A	A	A	A
Pepper Road E/ Walker Road	1.1	A	A	A	A	A	A
Pleasant Hill Road S/ Watertrough Road	1.13	A	A	A	A	A	A
River Road Btw Olivet Rd. & Slusser Rd.	1.05	A	A	A	A	A	B
River Road W/ Fulton Road	1.05	A	A	A	B	B	D
River Road W/ Mirabel Road	1.05	A	A	A	B	A	C
Roblar Road E/ Canfield Road	1.6	A	A	A	A	A	A
S.H. 1 W/ Bodega Hwy	1.6	B	A	A	A	D	D
S.H. 116 E/ Adobe Rd.	1.15	E	B	F	C	F	D
S.H. 116 Guerneville Br over Russian River	1.4	A	A	A	A	A	A
S.H. 116 N/ Guerneville Rd.	1.4	A	A	A	A	A	A
S.H. 116 S/ Adobe Rd.	1.15	A	A	B	C	B	C
S.H. 116 S/ Occidental Rd.	1.4	A	A	A	A	A	A
S.H. 116 W/ Stony Point Rd.*	1.2	D	B	A	E	E	B
S.H. 12 E/ Llano Rd.	1.1	A	D	F	D	F	D
S.H. 12 N/ Agua Caliente	1.1	E	C	C	E	C	F
S.H. 12 N/ Boyes Blvd.	1.1	F	D	F	F	F	F
S.H. 12 S/ Verano Rd.	1.1	D	D	F	F	F	F
S.H. 121 E/ Napa Rd.	1.3	B	A	B	A	C	B
S.H. 121 N/ Hwy 37*	1.3	B	D	C	A	C	E
S.H. 128 @ Napa County Line	1.2	A	A	A	A	A	A
Tomales Road W/ Bodega Avenue	1.6	A	A	A	A	A	A
Trinity Road E/ S.H. 12	1.1	A	A	A	A	A	A
Valley Ford Road E/ Gericke Road	1.6	A	A	A	A	A	A
Warm Springs Road N/ Sonoma Mt Road	1.1	A	A	A	B	B	B
Watmaugh Road E/ Arnold Drive	1.1	A	A	A	A	A	A
Westside Road N/ Felta Road	1.4	A	A	A	A	A	A
*Weekend peak direction is reversed from weekday							

To estimate weekend traffic for the DEIR analysis, weekday and weekend traffic counts were collected on all road segments shown in Exhibit #7.6.2. Using these counts, a ratio between weekday and weekend traffic volume was established. This ratio was then used in conjunction with projected increases in winery and visitor serving uses shown in Exhibit #4.8-4 of the DEIR to forecast anticipated weekend volume and LOS.

Exhibit #4.8-4 of the DEIR provides estimates of future wineries and related visitor serving uses. The number of new wineries and associated visitor serving uses is based on projected increases in wine grape production that are identified and discussed in Section 4.8 (Agriculture and Timber Resources) of the DEIR and are further described in response to comment #219-08. The increased number of wineries and related events were included in the traffic modeling conducted for the DEIR.

In response to comments on weekend traffic from agricultural tourism, the DEIR preparers sought to verify the accuracy of the DEIR's analysis of weekend traffic. Additional traffic counts were taken in Sonoma Valley and Dry Creek Valley in 2005 and 2006 and compared to the model forecasts of weekend traffic above. As discussed below, this validation indicates that while weekend traffic volume will increase as the result of Draft GP 2020 land uses and development, the traffic impacts do not exceed those already described in the DEIR.

Sonoma Valley:

To assess the DEIR's weekend traffic forecast in a high traffic volume viticulture region, model output was compared with Caltrans' seven-day traffic counts taken in March, May, August and November of 2005 at postmile #37.5 on Highway 37 near the City of Sonoma. The DEIR projections are based on traffic counts taken in 2000, and forecasts congestion for 2020. To verify the SCTM accuracy, this forecast was then interpolated to estimate traffic volume for 2005 in order to compare the forecast to the Caltrans counts. Analysis showed a good correlation between projections in the DEIR and actual traffic counts.

The Caltrans count location is approximately ¼ mile south of the DEIR collection point near the intersection of Highway 12 and Verano Road. The traffic model uses 2000 as a base year and assumes a linear increase in traffic volume to the 2020 horizon. Therefore, the increase in traffic forecast for 2005 would be 25% of the total predicted for 2020, resulting in a predicted weekend PM peak traffic hour traffic volume of 760 vehicles for the year 2005. The measured median weekend PM peak traffic hour traffic volume for 2005 was 615 vehicles per hour. PM peak traffic counts were slightly lower than the model's predictions due to the relatively continuous nature of weekend traffic, which does not exhibit the strong peaks of weekday traffic. If the weekend daily volume for this segment were redistributed to a typical weekday traffic pattern, the PM peak hour traffic would be approximately 740 vehicles, which correlates very well with the forecast of 760 vehicles. The DEIR's forecast of weekend traffic for high volume roads appears to be as accurate as existing technology allows.

Dry Creek Valley:

The second test was performed in Dry Creek Valley and was intended to capture major special event traffic as well as to validate the DEIR weekend traffic projections for lower volume roads. Continuous hourly traffic counts were collected in Dry Creek Valley from March 22 through July 12 of 2006. The area and time period was selected for four reasons:

-The weekend to weekday traffic volume ratio for Dry Creek Road is 2:1, the highest identified by the DEIR,

-Dry Creek Valley has a relatively high concentration of wineries with an isolated network, requiring relatively few count locations (Dry Creek, West Dry Creek, and Canyon Roads) in order to collect comprehensive traffic data,

-Roads in Dry Creek Valley are similar in classification and traffic volume to those in most other viticulture regions of the County, and

-Counts taken over this time period enables a "normal" weekend traffic baseline to be established, which can then be compared to major holiday weekends (Memorial Day and Fourth of July), and a major special event (Passport to Dry Creek Valley) on the weekend of April 29-30.

Traffic was counted twenty four hours per day, and totaled on an hourly basis. According to Winegrowers of Dry Creek Valley, 4,200 individual passports were sold for Passport Weekend, with 42 of the 58 wineries located in Dry Creek Valley participating in Passport Weekend. Weather conditions were good for Passport, Memorial Day, and Fourth of July weekends.

For purposes of identifying traffic impacts, the DEIR uses the County's LOS standard of LOS C or better (i.e., the transition between LOS C and D). Dry Creek Road, which was observed to have the highest volume of traffic in the valley, is classified as an Arterial A facility. Traffic volume on this class of road must be under 1243 vehicles per hour in order to operate at LOS C or better. Interpolation of the DEIR traffic data to the year 2006 results in a weekend peak volume forecast of 295 vehicles per hour for Dry Creek Road. The measured median peak count was 278, which is a very good correlation, and is far below the threshold of significance. The weekend to weekday ratios for Dry Creek, West Dry Creek, and Canyon Roads in Exhibit #7.6-2 of the DEIR show a good correlation with the measured median hourly volume counts, and, if anything, appear to slightly overestimate the potential impact of weekend traffic.

Over 75% of all wineries in Dry Creek Valley participated in the Passport to Dry Creek Valley event. Congestion during this event is similar to special event clustering in that multiple events were held simultaneously at a number of wineries that are in close geographic proximity to each other. While this event did generate the highest traffic volume recorded during the traffic study (661 vehicles per hour), all roads in Dry Creek Valley operated at LOS A during Passport Weekend. In most areas of the County, a similar situation exists. While multiple special events may create a noticeable increase in traffic, road capacity exists to accommodate the additional volume without significant congestion on a cumulative basis. Interestingly, the results of these counts indicate that even a concentration of tourism activities does not appear to trigger congestion at a cumulative level.

However, the potential exists for localized traffic impacts resulting from individual tourism activities or from a series of activities that are concentrated in an area where the same intersection or road segment is affected. These types of impacts can be addressed in the detailed environmental review for wineries and other specific agricultural tourism projects. In addition, the Draft GP 2020 Agricultural Resources Element includes Policy AR-6c and Agricultural Resources Program 7 calling for a comprehensive event coordination program to monitor and track events in order to reduce cumulative impacts. Draft GP 2020 also includes Policies AR-5g and AR-6f that are intended to avoid concentration of agricultural support uses and agricultural tourism, in large measure to avoid traffic congestion.

In summary, the study of 2005 and 2006 traffic counts in Dry Creek Valley and Sonoma Valley validates the DEIR's analysis of weekend traffic congestion. Although modeling techniques are imperfect at predicting weekend travel, the DEIR analysis of weekend traffic impacts is as accurate and comprehensive as possible and adequately addresses future traffic impacts resulting from

winery and associated visitor serving uses at a program level of detail appropriate for a General Plan EIR. Weekend traffic count data and analysis for the Dry Creek Valley and Sonoma Valley studies are available for review at PRMD.

Master Response L
SONOMA COUNTY AIRPORT MASTER PLAN

Several comments related to impacts of the Sonoma County Airport Master Plan, a proposal to lengthen the runway and make other improvements to the County's Airport. This project is identified in Section 6.2 (Cumulative Impacts) of the DEIR as one of the "cumulative projects" that is considered in the DEIR's cumulative impact analysis.

The Airport Master Plan is not proposed as part of the Draft GP 2020 Air Transportation Element. The plan is still being formulated by Airport staff working with a citizen's advisory committee and consultant. Possible changes include revised projected commercial airline operations, an extended runway, a new terminal, and other improvements related to commercial airline services. Depending on the final recommendation, the plan may involve an amendment of the Air Transportation Element and the Airport Land Use Commission's Comprehensive Airport Land Use Plan. Once the scope of the plan has been decided, an EIR will be prepared to analyze its impacts. It may be several years before the plan and EIR are ready for consideration. Since the details of the plan are not yet known, it is not possible for the Draft GP 2020 DEIR to provide a meaningful analysis of its impacts, even at a general level of detail. Accordingly, the DEIR concludes that although the plan may increase air quality and noise impacts around the Airport, the extent and significance of these impacts is unknown and speculative. In the meantime, the Draft GP 2020 Air Transportation Element continues the goals, objectives, and policies of the current General Plan that limit commercial airline services to a specified number of departures each day and that further limit the length of the runway to the current length of about 5000 feet.

Master Response M
SOLID WASTE MANAGEMENT

Solid waste policies in Draft GP 2020 serve as the broad enabling language for implementation of the County Integrated Waste Management Plan (CoIWMP), which is the principal planning document for solid waste management in the County. As stated in Objective PF-2.9, the Draft GP 2020 Public Facilities and Services Element relies upon the CoIWMP as the policy document for the County's solid waste operations. Section 4.9 (Public Services) of the DEIR addresses the impacts of Draft GP 2020's future demand for solid waste disposal.

Since publication of the DEIR, the County's Central Landfill has been temporarily converted to use as a transfer station. As noted in the DEIR on pages #4.9-46 and #4.9-50, in May 2003 the County detected leachate and gas constituents beneath the landfill liner in the expansion area of the Central Landfill. This occurrence has caused the County to switch to an out-haul system and delayed construction of landfill expansion projects that may be necessary for long term adequate in-County disposal of solid waste generated under Draft GP 2020. Working with the Regional Water Quality Control Board, the County has addressed the leachate and gas issue and the RWQCB staff is satisfied with the County's remediation. No contamination has been detected offsite, monitoring reports have been timely submitted to regulatory agencies, and stabilization of onsite leaks is complete (Personal communication, Susan Klassen, Department of Transportation and Public Works). Other, non-landfill operations at the Central Landfill, such as the household hazardous waste disposal program, composting, and recycling program continue to operate.

During the out-haul period, all municipal solid waste received at county disposal sites is being

transported by truck to out-of-county landfills within the State of California. At present, these include four other landfills in Marin and Solano Counties. Each of these four sites is subject to the applicable regulations and oversight described on page #4.9-47 of the DEIR. If, in the future, sites outside of the State are utilized, they are subject to federal regulations as well as the regulations of the applicable state. As a result, no additional water quality or other impacts at the receiving sites resulting from off-site disposal are anticipated.

The DEIR preparers were aware of the potential closure of the Central Landfill at the time the DEIR was being prepared and considered it in the analysis of Impact #4.9-6. The DEIR concluded that because of the uncertainties about the continued use of the Central Landfill, sufficient landfill capacity was uncertain and the impact was determined to be significant and unavoidable (DEIR, page #4.9-51).

During this period, trucks will likely continue to be used to haul waste from the Central Landfill. The anticipated level of additional truck traffic is estimated to be 68 trips per day between the hours of 7AM and 4PM, averaging 8 trips per hour. Without these trips, the affected roadways, Meacham Road, Pepper Road, Stony Point Road, Hwy 37 and Hwy 101, are anticipated to operate at LOS A (northbound direction) and A (southbound direction) on Meacham Road and A/C, F/B, and F/B on the other three roads, respectively. The additional hauling on these roads would increase the projected trips by only a small percentage ranging from about 3% on Pepper Road to less than .06% on Hwy 101. In each case, the increase in trips is not enough to trigger a decrease in the projected LOS. Although the current number of trips may increase with the increased volume of waste in the future, the number of trips would remain well within these levels of service. In addition, the increased trips would not cause the LOS F on Highway 37 and Highway 101 to worsen significantly, due to the small increase in trips in relation to the projected future traffic volumes on these roads.

As a result, the temporary hauling of solid waste outside of the County would not result in an additional significant impact on congestion beyond what was identified in the DEIR. Accordingly, emissions from trucks would not be expected to generate significant additional impacts beyond what is identified in the DEIR.

The County has hired a consultant to reassess the long term waste plan established in the 2003 CoIWMP and make recommendations to the Board of Supervisors as to whether the existing plan is still feasible or whether it needs to be modified in order to maintain an environmentally protective and cost effective system for the County and Cities. No policy decisions to deviate from the current 2003 CoIWMP and permanently close the Central Landfill have been made. However, the Sonoma County Waste Management Agency is in the process of updating the CoIWMP. Any proposed amendments to the CoIWMP would be evaluated for General Plan consistency and be subject to environmental review under CEQA. Policy PF-2q calls for an amendment of the CoIWMP if necessary to address shortfalls in landfill capacity. The extent that out-hauling of waste by rail may be considered in the future is unknown at this time and is considered to be too speculative to address as part of the DEIR. If it is proposed, its potential impacts would be addressed as part of the environmental review conducted for the project.

Regarding comments that the DEIR should analyze the impacts of leachate at the Central Landfill at Meacham Road, the landfill is an existing land use that is subject to the regulation and operational requirements of the Regional Water Quality Control Board. As an existing use, it is part of existing conditions and any impacts are not impacts of Draft GP 2020 and are not required to be addressed in the Draft GP 2020 DEIR. The DEIR already addresses the use of the landfill for the future disposal of waste generated by Draft GP 2020 at a program level of detail appropriate for a General Plan EIR. See also Master Response C (Program EIR/Level of Detail).

Master Response N
CLIMATE CHANGE

A number of comments suggested that the DEIR identify and analyze climate change as a potential impact of Draft GP 2020 land uses and development. Comments suggested the DEIR should include an analysis of greenhouse gas (GHG) emissions likely to result from Draft GP 2020, as well as mitigation measures to reduce emissions. Comments further suggested the DEIR should analyze the ways in which collective increased GHG emissions may cause or contribute to Draft GP 2020's environmental impacts.

The issue of climate change as a result of human activity is not new, but has recently begun to receive greater public attention. Comments correctly point out that the scientific community is in agreement that climate change from GHG emissions is a reality and that human activities contribute to it by intensifying the naturally-occurring "greenhouse effect" by increasing the amount of GHGs in the earth's atmosphere, leading to increased warming of the earth's surface. State and federal agencies, as well as international governments and organizations, are beginning to develop strategies to address climate change, focusing primarily on the control and reduction of GHG emissions. In California, both the Governor and the Legislature have committed to establishing and achieving long-term goals to reduce GHG emissions through Executive Order No. S-3-05 and Assembly Bill 32, the California Global Warming Solutions Act of 2006 (AB 32).

These efforts have not yet produced regulatory guidance, thresholds of significance, or other standards for the evaluation of GHG emissions as an impact in CEQA documents. CEQA nevertheless requires the County to "use its best efforts to find out and disclose all that it reasonably can." (CEQA Guidelines, § 15144). To that end, this master response describes applicable state legislation, the likely impacts of GHG emissions in Sonoma County, the County's program for reducing GHG emissions from County operations, and the policies in Draft GP 2020 that support reducing GHG emissions.

Executive Order No S-3-05

Governor Schwarzenegger signed Executive Order No. S-3-05 on June 1, 2005. The Order established targets for reducing California's GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. To meet the targets, the Governor directed the Secretary of the California Environmental Protection Agency (Cal EPA) to coordinate with other state agencies, including the Resources Agency, the Air Resources Board, and the Energy Commission, to create a Climate Action Team to implement GHG emission reduction programs and report on the progress made toward meeting the statewide GHG targets.

The California Global Warming Solutions Act (AB 32)

In September 2006, the California Legislature enacted AB 32, which added Division 25.5 (commencing with Section 38500) to the California Health and Safety Code. This division, known as the California Global Warming Solutions Act, sets forth the Legislature's findings and proposed strategy for reducing California's emissions of GHGs.

AB 32 identifies the following potential impacts as a result of global warming:

(a) Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the

State from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

(b) Global warming will have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry. It will also increase the strain on electricity supplies necessary to meet the demand for summer air-conditioning in the hottest parts of the state.

AB 32 requires the California Air Resources Board (CARB) to:

- determine the current level of GHG emissions in California by requiring statewide reporting and verification of GHG emissions (defined as carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride);
- reconstruct the 1990 levels of California's GHG emissions;
- adopt a statewide GHG emissions limit equal to the approved 1990 emissions levels; and
- set a reduction schedule and adopt regulatory programs by January 1, 2011, to achieve the target levels by 2020.

By June 30, 2007, CARB is required to publish a list of "discrete early action" measures that can be implemented before it adopts the emissions limit and regulations.

In setting the policy framework for CARB's implementation of the Act to address these impacts, AB 32 does not indicate what role local land use planning should play in the statewide strategy or how environmental review under CEQA is implicated. The County will comply with all regulations promulgated by CARB that are applicable to it. However, at present, those regulations do not exist. CARB has begun holding workshops and public meetings on topics related to implementation of AB 32. None of the workshops have addressed the role of local land use planning or CEQA. It is noteworthy that CARB's "Proposed Early Actions to Mitigate Climate Change in California," published on April 20, 2007, proposes three early action measures, none of which relate to local land use planning or CEQA. They are:

- the Governor's Low Carbon Fuel Standard,
- reduction of refrigerant losses from motor vehicle air conditioning maintenance, and
- increased methane capture from landfills.

CARB is initiating work on another 23 GHG emission reduction measures that will follow a later rule-making schedule. Although stakeholders suggested CARB address "GHGs in General Plans and CEQA" as a discrete early action measure (listed in Appendix B to the report), CARB did not discuss that suggestion in the report. CARB has instead indicated that the CEQA and General Plan guidance will be forwarded with the other suggestions listed in Appendix B to the appropriate state agencies (in this case, the California Resources Agency and CARB) for their future consideration.

State lawmakers have since introduced as many as 60 bills per legislative session that would take California in any number of policy directions with regard to global warming. The final policy choices,

and their implications for land use planning and CEQA review, are not yet known.

Potential Impacts of Climate Change

Although it is widely accepted that climate change is occurring, there is continuing uncertainty and disagreement regarding the magnitude, precise causes and effects, and timing of the warming trend. Little is known about how specific regions will be affected by climate change. Therefore, predicting the local effects of climate change in Sonoma County is extremely difficult. The following brief summary of potential effects of climate change is taken from *Climate Change and California Water Resources: A Survey and Summary of the Literature* by the Pacific Institute (Diparsky and Gleick), a 2003 literature search report prepared for the California Energy Commission, which summarizes peer-reviewed publications on climate change (available online in the Volume 4 Reference Guide to the 2005 Department of Water Resources (DWR) Water Plan at http://www.waterplan.water.ca.gov/docs/cwpu2005/vol4/vol4-globalclimate-climatechangeandcaliforniawater.pdf); and *Our Changing Climate, Assessing the Risks to California: A Summary Report from the California Climate Change Center*, 2006, a collaborative effort of CARB, the Department of Water Resources, the California Energy Commission, CalEPA, and the Union of Concerned Scientists, (available online at http://www.climatechange.ca.gov/biennial_reports/2006report/index.html). Other reports and information about climate change, particularly as it might affect California, are available on the State of California's official website on climate change, The California Climate Change Portal, at http://www.climatechange.ca.gov/index.html.

Modeling of climate change consistently predicts increasing temperatures, but the ways in which increasing temperatures will affect precipitation is less understood. As noted in *Climate Change and California Water Resources*, "Considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change." (*Climate Change and California Water Resources*, p. 6.) On average, precipitation projections for California analyzed in *Our Changing Climate* show little change in total annual precipitation. (*Our Changing Climate*, p. 3.) Other studies show significantly more precipitation. (*Climate Change and California Water Resources,* p. 6.) The studies that predict an increase in precipitation in California show the increases centered in Northern California. (*Ibid.)* Although regional and local changes in hydrological conditions attributable to greenhouse warming are uncertain, a long-term increase in the intensity of winter storms and a corresponding increase in risk of flooding in California are likely. (*Climate Change and California Water Resources*, pp. 13, 32). Whether winter storms will be more frequent is less certain. (*Ibid.*)

There is general agreement that global warming will cause significant long-term changes in snowfall and snowmelt in the Sierras, decreasing the amount of snow, shortening the snow season, and accelerating snowmelt, leading to more rapid and earlier seasonal runoff. (*Climate Change and California Water Resources*, p. 10.) The Russian River watershed does not depend on Sierra snowmelt for its water. Rather, it is largely fed by rainfall from winter storms originating over the Pacific Ocean. However, the Eel River system does depend to some degree on snowmelt, and the Russian River flow is supplemented by diversions from the Eel River through PG&E's Potter Valley hydroelectric plant. A change in snowmelt thus may affect the amount of water available in the Eel River system, and therefore to some extent in the Russian River.

Although it is generally agreed that long-term increases in precipitation will lead to increases in runoff, no studies have identified or quantified specific precipitation and runoff impacts in particular watersheds. (*Climate Change and California Water Resources*, p. 14.) Little is known about how groundwater recharge and water quality will be affected. (*Id,* at p. 20.) Higher rainfall could lead to

greater groundwater recharge, although reductions in spring runoff and higher evapotranspiration could reduce the amount of water available for recharge. (*Ibid.*)

Water quality depends on a wide range of variables, including water temperatures, streamflows, the rate and timing of runoff, and the ability of watersheds to assimilate wastes and pollutants. Climate change could affect all of these variables in both positive and negative ways. (*Climate Change and California Water Resources*, p. 18.) Higher winter flows could reduce pollutant concentrations, but could lead to increased sedimentation. Greater urban runoff could also lead to adverse water quality impacts. (*Ibid.*) Lower summer flows could reduce dissolved oxygen concentrations, increase pollutant concentrations, and increase water temperatures. (*Ibid.*)

A rise in sea level from ice melting would affect groundwater aquifers and coastal ecosystems through greater saltwater intrusion. (*Our Changing Climate,* p. 7.) Rising sea levels could also impact coastal development, accelerate coastal erosion, and cause the failure of dams and levees. (*Id.,* at p. 12.)

As a result of climate change, water quality may be worse than predicted, depending on streamflows and potential changes in runoff. Sedimentation and saltwater intrusion may increase, drainage patterns may change and flooding impacts are likely to be worse, and there may be a greater potential for levees and dams to fail. Groundwater levels may either fall or rise, depending on the location and changes in precipitation and recharge.

Increasing temperatures generally lead to an increase in evaporation, which can result in drier soils in the summer months, possibly leading to droughts, adverse impacts to agricultural production, and increased irrigation. (*Climate Change and California Water Resources*, p. 17.) Rising temperatures are also likely to adversely affect the quantity and quality of yield for a number of California's agricultural products, including wine grapes. (*Our Changing Climate*, p. 8.) Although an increase in global average evaporation is predicted, impacts to a particular region will depend on local vegetation patterns and soils. (*Climate Change and California Water Resources,* p. 10.) Studies of whether plant transpiration will be adversely affected have been inconclusive, with some studies showing greater water use by plants and others showing reduced water use. (*Ibid.*) Climate change may also contribute to an increase in pests and pathogens, thereby increasing the use of pesticides and herbicides. (*Our Changing Climate*, p. 9.)

The factors described above may also adversely affect the health and productivity of forestlands. An increase in temperatures could lead to an increase in wildfires, although the risk of wildfires is affected by a large number of factors that will vary by region, including precipitation, winds, temperature, and landscape and vegetation conditions. (*Our Changing Climate*, p. 10.) Impacts to biological resources may also be worse, but it is not yet known precisely how special status species, sensitive natural communities, and wetlands would be affected.

Air quality problems may be exacerbated due to an increase in the frequency, duration, and intensity of conditions conducive to air pollution, including ground-level ozone and airborne particulate matter. (*Our Changing Climate*, p. 5.) Thus, air quality impacts may be worse than predicted as a result of GHG.

Precipitation, temperature, and carbon dioxide levels affect both the supply of and demand for water resources. (*Climate Change and California Water Resources,* p. 29.) Depending on the variables described above, California could have more water available due to increased humidity and rainfall and greater groundwater recharge, or less water available due to no change or slightly less rainfall and greater evaporation, and a reduction in the Sierra snowpack.

The Analysis of GHG as an Impact Under CEQA

The DEIR acknowledges on page #4.12-3 that the use of fossil fuels such as gasoline, oil, natural gas, and coal generates emissions of GHGs, including carbon dioxide, methane, oxides of nitrogen, and carbon monoxide, which contribute to climate change and global warming. However, the DEIR does not attempt to establish a significance threshold for GHG emissions or attempt to calculate the GHG emissions that are likely to occur as a result of Draft GP 2020 land uses and development. As discussed below, no regulatory guidance or standards yet exist for evaluating GHG emissions in the context of land use planning and CEQA analysis, no standard methodology yet exists for measuring GHG emissions, and science is only beginning to quantify the complicated interplay of land use and climate change. As a result, such an evaluation would be speculative and premature, and thus is not required by CEQA.

CEQA defines a significant environmental impact as a reasonably foreseeable direct or indirect physical change to the environment caused by the project (CEQA Guidelines, § 15358). A determination of whether a project may have a significant effect on the environment calls for careful judgment, based to the extent possible on scientific and factual data (CEQA Guidelines, § 15064). Specific data should be presented only if it is reasonably feasible to do so. An impact that is too speculative is not "reasonably foreseeable" and need not be evaluated (CEQA Guidelines, § 15145). As noted by a leading CEQA commentator, "[i]n appropriate circumstances, an EIR may find that no accepted methodology or standards exist to measure an impact. This finding may be upheld if supported by evidence and analysis showing that a reliable method for assessing an impact is not available." (Kostka & Zischke, Practice Under CEQA (CEB), § 13.25, p. 652, citing *Laurel Heights Improvement Ass'n. v. Regents of Univ. of Cal.* (1993) 6 Cal.4th 1112, 1138.)

CEQA requires analysis of a project's environmental effects based on the net increment of change that will occur as a result of the project. (CEQA Guidelines, § 15126.2(a).) Such an analysis requires a methodology to determine the increment of change, and appropriate standards for determining whether the change is significant. (CEQA Guidelines, § 15064.7.) In the case of GHG emissions, the relevant state and federal agencies have not yet identified either a methodology or standards for determining a local general plan's incremental impact on climate change. Neither CARB, the Bay Area Air Quality Management District (BAAQMD), nor the Northern Sonoma County Air Pollution Control District (NSCAPCD) have developed guidelines or standards for evaluating GHGs in the context of land use planning. According to NSCAPCD staff, the air districts are in the process of meeting to determine appropriate significance thresholds for GHG emissions (Barbara Lee, Air Pollution Control Officer, personal communication, May 2007). However, the districts have not yet reached a consensus as to how local lead agencies should evaluate the impacts of GHGs from land use plans. The development of CEQA significance thresholds and methodologies should be guided by the appropriate responsible agencies to achieve a standardized approach consistent with AB 32. This is especially important given the complexity of climate change and the State's leadership role in establishing California's response to this important environmental issue. Without this guidance, a significance determination in the Draft GP 2020 DEIR would be premature.

This state and federal guidance is particularly important because climate change is not just a local or regional issue, but a state, federal, and global problem. Unlike other air quality emissions, which create impacts in a local area and regional air basin, GHG emissions cause national and international impacts regardless of their source. Substantial additional scientific research and regulatory guidance are needed to consistently determine, for all general plans statewide, whether a plan's incremental impacts on climate change would be significant, and whether and how cumulative GHG emissions will affect the plan's environmental impacts.

For example, most GHG emissions in Sonoma County are due to transportation, especially

automobile use. It would seem intuitive that an increase in vehicle miles traveled (VMT) would result in an increase in GHG emissions, and therefore contribute to global climate change. However, an increase in VMT in Sonoma County due to people relocating from another county would cause a corresponding decrease in VMT in that county, and very little change in the total emissions. Thus, while an increase in VMT due to growth and development within one county would plainly cause an increase in localized air quality impacts (e.g., exposure of local residents along roadways to toxic air contaminants or contribution of ozone precursors to an area with an already significant level of ozone precursors), it would not necessarily lead to a corresponding increase in global GHG emissions. Therefore, simply evaluating a change in VMT within Sonoma County is not an adequate methodology for evaluating a change in GHG emissions.

Notwithstanding that no accepted methodologies or standards yet exist to measure the impact of Draft GP 2020's GHG emissions with respect to climate change, it is acknowledged that Draft GP 2020 land uses and development may contribute to GHG emissions. As described on DEIR page #3.0-15, Draft GP 2020 projects by 2020 a population in the unincorporated area of 147,660, which is the County's share of the regional growth projected for the Bay Area. This would be a 15 percent (19,064 additional residents) increase from the year 2000 population of 128,596. The majority of growth in the County would continue to occur within the nine cities. This growth may contribute to GHG emissions on a cumulative basis due to increased development of housing, infrastructure, and VMT, although Draft GP 2020 contains numerous policies to reduce VMT.

The County's Program to Reduce Greenhouse Gas Emissions

As noted in the DEIR on page #4.12-3, in 2002 Sonoma County and all nine cities within the County joined the Climate Protection Campaign sponsored by the International Conference on Local Environmental Initiative (ICLEI) and pledged to reduce emissions of GHGs within local government operations. Since the publication of the DEIR, Sonoma County has taken an aggressive approach to controlling GHG emissions from County operations. In June 2006, the County's General Services Department released a "Climate Protection Action Plan for Sonoma County," establishing a baseline inventory of GHGs from County operations, including from employee commute trips, outlining existing and proposed programs to reduce those emissions, and proposing a target of a 20 percent reduction by the year 2010. The Board of Supervisors adopted the plan in September 2006. Current County programs include the continued capture of methane from the Central Landfill for conversion to electricity (one of the "early actions" proposed by CARB pursuant to AB 32), converting the County bus system to natural gas, implementing a County carpool program, supporting an employee transit use program, and evaluating the feasibility of photovoltaic solar energy systems on County buildings and Water Agency facilities.

In addition to the County's programs to reduce GHG emissions from its own operations, current County land use policies and programs are already contributing to lower GHG emissions. For example, County land use policies avoid urban sprawl that generates VMT. Eight of the nine cities already have voter-approved Urban Growth Boundaries, and the County has adopted voter-protected open space areas around these boundaries and included its own designated urban boundaries around unincorporated communities. The Sonoma County Agricultural Preservation and Open Space District utilizes voter approved sales taxes to acquire development rights on forest and agricultural lands. The County also supports and participates in development of SMART's passenger rail system, coupled with feeder transit and other non-vehicular venues (e.g., bicycle-pedestrian pathways). Wastewater from the County and the cities is re-used for agriculture and renewable energy generation at the Geysers Steamfield.

Draft GP 2020 Policies and Programs

Draft GP 2020 and the DEIR include a broad range of policies and programs to reduce GHG emissions from land uses and development and to ensure compliance with new standards as they are developed. A number of comments suggest the DEIR should be revised to include a determination that GHG emissions are a significant and unavoidable cumulative impact of Draft GP 2020. This is the approach taken by Marin County in its DEIR for its general plan update based on the premise that any increase in GHG emissions over existing levels would be a significant impact, but that it is uncertain whether GHG emissions would be reduced sufficiently to bring them below existing levels. The policies identified in Marin County's DEIR are similar to those already included in Draft GP 2020. The Marin County DEIR's approach is understandable, but is not required by CEQA and does not appear warranted by existing scientific evidence. The scientific community has not found that any increase over existing levels is automatically a significant impact, or that all future projects would cause a significant impact by increasing GHG emissions to any degree above baseline. To the contrary, none of the relevant agencies have yet determined a methodology for determining a general plan's incremental impact on global warming, or identified a threshold for determining whether that impact would be significant.

Draft GP 2020 includes a significant and broad based set of policies and programs to reduce GHG emissions. These include limiting new development to urban areas, preserving land uses that can offset and even remove GHG emissions, reducing vehicle miles traveled, promoting alternative transportation, reducing energy use and exploring renewable energy, promoting water conservation and reuse, and directly reducing GHG emissions. Following are the specific policies:

Limitations on New Development and Preservation of Land Uses

The following policies would reduce GHG emissions by avoiding sprawl and preserving agricultural lands, timberlands, oak woodlands, and other land uses that offset GHG emissions, and even "scrub" existing emissions from the atmosphere.

Policy LU-3c: Avoid urban sprawl by limiting extension of sewer or water services outside of designated urban service areas pursuant to the policies of the Public Facilities and Services Element.

Policy LU-6g: Where appropriate, encourage and support the use of public lands for community gardens and expanding agricultural opportunities.

Policy LU-6i: Provide expanded opportunities for a mix of residential and commercial or industrial use in urban service areas.

Policy LU-11e: Encourage use of compact and mixed-use development that minimizes the need to drive, re-uses existing infill and brownfield sites that have been thoroughly reclaimed and remediated before using open land, and avoids the extension of sprawl.

Policy LU-11f: Encourage conservation of undeveloped land, open space, and agricultural lands; protection of water and soil quality; restoration of ecosystems; and minimization or elimination of the disruption of existing natural ecosystems and flood plains.

Policy LU-11i: Encourage participatory and partnership approaches to planning, including planning for sustainability, integrally involving local community residents.

Policy LU-11k: Support incentives and other economic tools to improve the sustainability of our natural and built environments and enhance natural resources.

Policy AR-1e: 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 farm workers.

Policy OSRC-7l: Identify important oak woodlands, assess current protection, identify options to provide greater protection of oak woodlands 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.

Policy OSRC-14i: Manage timberlands for their value both in timber production and offsetting greenhouse gas emissions.

Reductions in Vehicle Miles Traveled

The following policies would reduce GHG emissions by encouraging telecommuting, carpooling, and similar programs to directly reduce VMT and traffic congestion.

Policy CT-2q: Promote a Traffic Demand Management program for County Government and schools.

Policy CT-2s: Encourage measures that increase the average occupancy of vehicles, including:

(1) Vanpools or carpools, ridesharing programs for employees, preferential parking, parking subsidies for rideshare vehicles, and transportation coordinator positions.

(2) Preferential parking space and fees for rideshare vehicles, flexibility in parking requirements, HOV lanes on freeways, and residential parking permit restrictions around major traffic generators.

Policy CT-2t: Encourage measures to modify the timing of peak commute and school trips to reduce congestion, including reduced work weeks, flexible, variable or staggered work hours. Consider adoption of standards requiring Traffic Demand Management programs and telecommuting for new businesses and employment centers.

Policy CT-2z: Encourage employers to increase use of telecommuting and home work employment.

Policy OSRC-16b: Encourage public transit, ridesharing and van pooling, shortened and combined motor vehicle trips to work and services, use of bicycles, and walking. Minimize single passenger motor vehicle use.

Policy OSRC-18r: Continue to promote flex-time work schedules for all County employees to encourage non-rush hour bicycle commuting and dispersal of rush hour motor vehicle traffic.

Promoting Alternative Transportation

The following policies would reduce GHG emissions by encouraging and facilitating bicycle, pedestrian, and other alternative methods of transportation that produce less emissions than motor vehicles, or no emissions at all. Draft GP 2020 contains more than two dozen such policies,

evincing a deep-seated commitment to alternative transportation and a permanent reduction in VMT.

Policy LU-11a: Encourage reduction in greenhouse gas emissions, including alternatives to use of gas-powered vehicles. Such alternatives include public transit, alternatively-fueled vehicles, bicycle and pedestrian routes, and bicycle and pedestrian-friendly development design.

Policy CT-1d: Work with the Cities to provide jobs, housing, shopping, and coordination of local transit along the SMART rail corridor in order to reduce the need for automobile travel to and from work and shopping centers.

Policy CT-1e: Support development, implementation, and operation of a commuter rail system and contiguous north-south pedestrian and bicycle path along the SMART rail corridor including the funding necessary to support a multi-modal feeder system.

Policy CT-1g: Provide east-west connectivity within each community, including interchange improvements, transit/rail stops, and pedestrian, bicycle, and other alternative transportation mode improvements that will improve access to Highway 101 and the rail/transit system.

Policy CT-2b: Establish transfer facilities and supportive park-and-ride lots that provide convenient connection to the transit routes on Figure CT-2. Locate transit centers to avoid rerouting by buses, provide adequate off street parking, and provide convenient pedestrian access from activity centers.

Policy CT-2d: Require major traffic generating projects on existing or planned transit routes to provide fixed transit facilities, such as bus turnouts, passenger shelters, bike lockers, and seating needed to serve anticipated or potential transit demand from the project.

Policy CT-2e: 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 utilize 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.

Policy CT-2f: 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.

Policy CT-2h: Work with the SCTA**,** SCT, SMART**,** and Cities to provide east/west route connections necessary to support commuter rail service.

Policy CT-2i: Support regional and commute bus service from Sonoma County to employment centers in San Francisco and Marin County.

Policy CT-2j: Encourage additional commute service routes within Sonoma County if efficient and cost effective.

Policy CT-2k: Encourage greater frequency of service and express commute service along the various intercounty routes where warranted.

Policy CT-2m: Provide a system of bus routes that is responsive to intercity commuters, transit dependent groups and persons with low mobility. Select route alignments to provide convenient access to major job centers, retail and recreational areas, high and medium density residential areas, and major health care and educational facilities.

Policy CT-2n: Add new intercity bus routes to the transit network that are responsive to growth patterns and are cost effective. Add other services as needed, including improved headways along bus routes, increased hours of operations, expanded express or commuter service along principle commute corridors during peak periods, and new route extensions to provide bus service to unincorporated communities.

Policy CT-2r: 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, sidewalks between transit stops and buildings, secure bicycle lockers and shower facilities, complementary street layouts and geometrics that accommodate buses and bicycles, exclusive bus lanes, land dedication for transit, and "transportation kiosks" for tenants of business and industrial parks.

(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.

(3) Street and highway design and geometrics to accommodate transit vehicles and bicycles, bus turnouts and passenger shelters, sidewalk access to transit stops, park-and-ride lots, HOV lanes on major highways, signal preempting for buses, and "transit centers" at rail stations and major focal points in the bus route network.

Policy CT-2x: Promote pedestrian, bicycle, and other alternative transportation modes. Educate motorists**,** bicyclists, pedestrians, and users of other alternative transportation modes regarding safety, rights, and responsibilities associated with use of the County transportation system.

Policy CT-2y: Implement the Sonoma County Bikeway Plan as described in the Open Space and Resource Conservation Element. Recognize the bicycle as an essential transportation mode and utilize the Bikeway Plan as a key implementation measure for the circulation and transit system.

Policy CT-4a: Establish commuter rail service between Cloverdale and Marin County through implementation of the SMART Rail Transit Project. Work with SMART, and the North Coast Railroad Authority to assure that both rail passenger and freight service is provided.

Policy CT-4c: Consider designation of commuter rail stations in unincorporated areas south of Healdsburg at key employment and high density residential centers.

Policy CT-4d: In coordination with SMART review major development projects that might impact future rail service and preserve opportunities for future rail service for transit and freight.

Policy CT-6f: Work with the City of Healdsburg and the Town of Windsor to provide supporting land uses and circulation infrastructure to accommodate commuter rail service in the City and Town.

Policy CT-6l: Work with the City of Santa Rosa to develop supporting land uses and circulation

infrastructure to accommodate commuter rail service in the City.

Policy CT-6n: Work with SMART to provide funding for development of a commuter rail station at the Airport Industrial Area.

Policy CT-6u: Work with the Cities of Rohnert Park and Cotati to provide supporting land uses and circulation infrastructure to accommodate commuter rail service in the Cities.

Policy CT-6cc: Work with the City of Petaluma to provide supporting land uses and circulation infrastructure to accommodate commuter rail service in the City.

Policy CT-6ee: Support future use of Port Sonoma as a ferry terminal and water transit connection to the Bay Area, including a potential rail transit connection.

Policy OSRC-14c: Continue to purchase and utilize hybrid, electric, or other alternative fuel vehicles for the County vehicle fleet; and encourage County residents and businesses to do the same.

Policy OSRC-16b: Encourage public transit, ridesharing and van pooling, shortened and combined motor vehicle trips to work and services, use of bicycles, and walking. Minimize single passenger motor vehicle use.

Policy OSRC-18r: Continue to promote flex-time work schedules for all County employees to encourage non-rush hour bicycle commuting and dispersal of rush hour motor vehicle traffic.

Policy OSRC-18s: Consider amending County regulations to provide for more flexible parking, circulation and other design standards for:

(1) Projects that incorporate higher density mixed land uses which allow the bicycle to be an effective alternative mode of transportation to the automobile.

(2) New industrial, office, institutional and commercial projects which provide employee showers and locker rooms.

Policy OSRC-18t: To the extent feasible, provide male and female shower and locker facilities and adequate bicycle parking at the County Administration Center and other County facilities.

Reducing Energy Use and Encouraging Renewable Energy

The following policies would reduce GHG emissions by reducing the use of energy sources that cause these emissions, and encouraging the use of alternative energy sources that produce less GHG emissions or no emissions at all.

Policy LU-11b: Encourage all types of development and land uses to use alternative renewable energy sources and meaningful energy conservation measures.

Policy LU-11h: Encourage development and land uses that pursue reduction and re-use of by-products and waste, especially approaches that also employ waste as a resource, such as eco-industrial development.

Policy OSRC-14a: Continue to support education programs that promote energy conservation; energy efficiency; and solid waste reduction, reuse, and recycling opportunities for County

operations, residents and businesses, and local utilities.

Policy OSRC-14b: Continue to provide strategic planning for energy conservation and efficiency in County operations.

Policy OSRC-14d: Support project applicants in incorporating cost-effective energy efficiency that may exceed State standards**.**

Policy OSRC-14e: Develop energy conservation and efficiency design guidelines for new development.

Policy OSRC-15a: Develop a Sonoma County Energy Strategic Plan that addresses the activities and operations of both County government and private residents and businesses.

Policy OSRC-15b: Encourage and promote the development of renewable energy and distributed energy generation systems and facilities for County operations.

Policy OSRC-15c: 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.).

Policy OSRC-15d: Incorporate energy facility siting policies into the Sonoma County Integrated Development Code which would:

(1) Define small-scale energy facilities as those less than 20 MW, and large-scale energy facilities as those 20 MW or larger.

(2) Allow small-scale renewable energy generation systems and facilities close to the end energy users in all zoning districts where visual and other environmental impacts can be mitigated.

(3) Allow large-scale energy generation facilities in commercial and industrial areas and not in residential, agricultural, and recreational areas.

(4) Discourage large scale energy facilities in designated Biotic Resource Areas, Scenic Resource Areas, and Geologic Hazard Areas unless essential to meet energy demand from renewable or distributed energy generation systems.

Policy OSRC-15h: Allow the use of hot water geothermal resources in all land use designations if it can be demonstrated that it will be compatible with surrounding land uses.

Policy OSRC-14j: Encourage the Sonoma County Water Agency and other water and wastewater service providers to reduce energy demand from their operations.

Policy OSRC-14f: Encourage the usage of the Leadership In Energy and Environmental Design (LEED) green building certification standards of the U.S. Green Building Council for new development.

Water

The following policies would reduce GHG emissions by reducing the use of potable water, increasing water conservation, and preserving sustainable water supplies notwithstanding future climatic changes.

Policy LU-8f: Increase the role of water conservation**,** storm water retention, and aquifer recharge for water supply purposes.

Policy LU-11d: Encourage methods of landscape design, landscape and park maintenance, and agriculture that reduce or eliminate the use of pesticides, herbicides, and synthetic fertilizers; and encourage the use of compost and conservation of water.

Policy LU-11g: Encourage development and land uses that reduce the use of water, use recycled water on-site, and employ innovative wastewater treatment that minimizes or eliminates the use of harmful chemicals and/or toxics.

Policy OSRC-7o: Encourage the use of native plant species in landscaping. For discretionary projects, require the use of native or compatible non-native species for landscaping where consistent with fire safety. Prohibit the use of invasive exotic species.

Policy WR-1u: In the marshlands and agricultural areas south of Sonoma and Petaluma, require all environmental assessments and discretionary approvals to analyze and**,** where practicable**,** avoid any increase in saltwater intrusion into groundwater.

Policy WR-2b: Initiate and support educational programs to inform residents, agriculture, businesses and other groundwater users of best management practices in the areas of efficient water use, water conservation, and increasing groundwater recharge.

Policy WR-2f: Require that discretionary projects in Urban Service Areas maintain the site's pre-development recharge of groundwater to the maximum extent practicable. Develop voluntary guidelines for rural development that would accomplish the same purpose.

Policy WR-3a: 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.

Policy WR-3h: Help public water suppliers to disseminate and discuss 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.

Policy WR-3k: Cooperate with public water suppliers in the planning, development and construction of the storage and transmission facilities needed to supply water pursuant to adopted General Plan policies, urban water management plans, water supply agreements, master facilities plans, and**,** where applicable**,** programs to mitigate identified groundwater overdraft conditions.

Policy WR-3q: Support cooperative inter-regional planning efforts by the public water suppliers, their contractors, other existing water users and Sonoma County to consider future demand projections concurrently with the availability of sustainable water supplies.

Policy WR-4b: Use water effectively and reduce water demand by developing programs to:

(1) Increase water conserving design and equipment in new construction.

(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.

(5) Reduce impervious surfaces to minimize runoff and increase groundwater recharge.

Policy WR-4e: Require water-conserving plumbing and water-conserving landscaping in all new development projects and require water-conserving plumbing in all new dwellings. Promote programs to minimize water loss and waste by public water suppliers. Require County-operated water systems to minimize water loss and waste.

Policy WR-4f: Promote programs for retrofitting plumbing, providing cost rebates, identifying leaks, changing landscaping, irrigating efficiently and other methods of reducing water consumption by existing users.

Policy WR-4h: Encourage and support conservation for agricultural activities that increase the efficiency of water use for crop irrigation, frost protection and livestock. Work with RWQCB and DWR to promote storm water impoundments for agricultural uses.

Policy WR-4i: Assess water use by County buildings and facilities and reduce water consumption to the maximum extent practicable.

Policy WR-4j: 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.

Policy WR-4k: Encourage graywater systems, roof catchment of rainwater and other methods of re-using water and minimizing the need to use groundwater.

Direct Reductions in GHG Emissions

Finally, the following policies would reduce global warming impacts by directly reducing GHG emissions from chemicals and commercial, industrial, and residential projects. Perhaps more importantly, the following policies would commit the County to developing a Greenhouse Gas Emissions Reduction Program that would include the development of a methodology to measure existing and future GHG emissions, the creation of GHG reduction policies in compliance with pending state and federal standards, and ongoing research and monitoring efforts to meet emission reduction targets and track long-term changes in climate and precipitation patterns in the County and region.

Policy LU-11c: Encourage the use of alternatives to harmful chemicals, heavy metals, and synthetic compounds.

Policy LU-11j: Support efforts and partnerships with agencies, organizations and other jurisdictions that improve technology for reducing dependence on non-renewable resources, harmful chemicals, and manufactured substances that accumulate in nature, and activities that harm life sustaining

ecosystems.

Policy OSRC-16a: Require that development projects be designed to minimize air emissions. Reduce direct emissions by utilizing construction techniques to decrease the need for space heating and cooling.

Policy OSRC-16c: Refer projects to the local air quality districts for their review.

Policy OSRC-16d: Review proposed changes in land use designations for potential deterioration of air quality and deny them unless they are consistent with the air quality levels projected in the General Plan EIR.

Policy OSRC-16e: Cooperate with the local air quality district to monitor air pollution and enforce mitigations in areas affected by emissions from fireplaces and woodburning stoves.

Policy OSRC-16f: Encourage the adoption of standards, the development of new technology, and retrofitting to reduce air pollution resulting from geothermal development.

Policy OSRC-16g: Residential units shall be required to only install fireplaces, woodstoves or any other residential wood-burning devices that meet the gram-per-hour EPA or Oregon DEQ wood heater emissions limits (exempt devices are not allowed).

Policy OSRC-14g: Develop a Greenhouse Gas Emissions Reduction Program to include the following:

(1) A methodology to measure baseline and future greenhouse gas emissions.

(2) Monitoring of progress in meeting emission reduction targets.

(3) Collaboration with local, regional, and state agencies to create effective greenhouse gas reduction policies in compliance with new State and Federal standards.

Policy OSRC-14h: Continue to participate in the International Council of Local Environmental Initiatives (ICLEI) Program.

Policy PS-4l: Continue to educate the public about green business opportunities and expand and promote the County Department of Emergency Services' Sonoma Green Business Program.

Policy WR-2k: Encourage and support comprehensive studies of long-term changes in climate and precipitation patterns in the county and region.

Conclusion

Climate change results from the emissions of GHGs, and is a significant cumulative impact of all development worldwide. Draft GP 2020 land uses and development could increase local emissions of GHGs, but it is yet not possible to determine whether this contribution would be cumulatively considerable because as yet there is neither an accepted methodology nor standards for determining a local general plan's incremental impact on climate change. The CARB and air districts are working on standards for GHG emissions, but this work is in a preliminary stage and no guidelines are available for CEQA analysis of GHG emissions in a general plan context.

The State of California has established goals for the reduction of GHG emissions to 1990 levels by

the year 2020. If achieved, these goals would reduce statewide emissions to levels well below baseline conditions evaluated in this EIR. By adopting the "Climate Protection Plan for Sonoma County," the County has committed itself to reducing its GHG emissions by 20% by 2010. In addition, Draft GP 2020 has numerous policies designed to reduce GHG emissions and minimize the impacts of climate change in Sonoma County.

Given the above, further analysis at this time would be speculative. In compliance with CEQA's information and mitigation requirements, Draft GP 2020 takes a conservative approach by including aggressive measures to reduce GHG emissions.

Master Response O
SB 221 AND SB 610

Several comments suggested that the DEIR should include a water supply analysis pursuant to State legislation passed in 2001 that requires water supply analyses for certain types of development projects. These comments attempt to link the Draft GP 2020 to the requirements of two laws, SB 221, codified in Government Code Section 66473.7, and SB 610, codified in several sections of the California Water Code.

SB 221 imposed a requirement that a reliable water supply be determined to exist prior to approval of a tentative map for a large residential subdivision (more than 500 units or more than 10% of the total connections of the water purveyor). SB 610 imposed a requirement for a water supply assessment as part of the CEQA review for large development projects as defined in Water Code section 10912. The list of projects that require a water supply assessment include residential, commercial, industrial, or mixed use projects generally equivalent in water demand to 500 or more residential units.

These laws, by their own terms, are not applicable to Draft GP 2020 or the DEIR. In fact, it is unlikely that any future land uses and development that could occur under Draft GP 2020 would be large enough to trigger the required analysis. The residential densities of the Draft GP 2020 land use maps do not allow a project of the size contemplated in either SB 221 or SB 610. In addition, the designated industrial and commercial lands are not large enough to accommodate projects of this magnitude. However, even if Draft GP 2020 were to allow future development projects of this size, a water supply assessment under either of these laws is not required as part of the General Plan or its EIR.

The DEIR provides an assessment of future water supplies in Section 4.9 (Public Services). Among other things, this section analyzes future water supplies for the urban areas of the unincorporated County that are served by public water providers. Capacity studies conducted by the County, in cooperation with the water purveyors, have been utilized in the impact analyses and are referenced in the DEIR. In addition, the appropriate Urban Water Management Plans have been considered, as required by law. As a result, the DEIR and the Draft GP 2020 meet the water supply planning requirements of state law. See also Master Response S (Water Supply) and Master Response P (Urban Water Management Plans).

Master Response P
URBAN WATER MANAGEMENT PLANS

Many comments suggested that the Draft GP 2020 and its DEIR should have been put on hold until the Sonoma County Water Agency (Agency) had completed its 2005 Urban Water Management Plan (UWMP), largely on the basis that this plan is necessary for both future water supply planning purposes and for a complete impact analysis in the DEIR. The Urban Water Management Planning

Act, which is located in Sections 10610 through 10656 of the California Water Code, requires that every urban water supplier adopt and submit a plan every five years to the State Department of Water Resources if the water supplier provides water for municipal purposes to more than 3000 connections or if the water supplier supplies more than 3000 acre feet per year.

Contrary to some comments, since Sonoma County is not a municipal water supplier, there is no requirement for the County itself to prepare a UWMP under this Code. However, the UWMPs prepared by urban water suppliers provide valuable information for future water supply purposes to the local governments that are responsible for land use planning. In Sonoma County, the urban water suppliers that must prepare a UWMP are the Sonoma County Water Agency, as a wholesale provider, and several of the retail providers that rely upon the Agency's wholesale supplies.

There is no provision in California Planning Law that would require that the County hold back its Draft GP 2020 until the Agency completed its updated UWMP. As part of the General Plan update process, the Agency participated in the development of the Public Hearing Draft GP 2020 recommended by the CAC and the proposed plan was referred to the Agency for its review and comment at the outset of the Planning Commission hearings in January 2006. The Agency also provided a copy of "the current version of its urban water management plan" for use in the General Plan update, as required by State law (see Govt. Code, § 65352.5). At the time of release of the Notice of Completion and the DEIR for Draft GP 2020, the Agency had not completed its 2005 Draft UWMP. As a result, the 2000 UWMP was the current, adopted plan, and the DEIR preparers considered it, among other information, for the water supply background and impact analysis in Section 4.9 (Public Services). In November 2006, the Agency released its Draft 2005 UWMP and adopted it on December 12, 2006.

Comments suggested that because the 2005 UWMP was not available, the Draft GP 2020 and DEIR did not include an adequate and up-to-date water supply analysis. There are two reasons why this assertion is incorrect. First, the primary water supply analysis prepared for the Draft GP 2020 and the DEIR was performed by County PRMD staff in consultation with water suppliers who provide water to the unincorporated County area. As such, it was a more comprehensive analysis than the Agency's UWMP with respect to the Draft GP 2020. The DEIR analysis involved an evaluation of the Draft GP 2020 water demands based upon projected growth in the unincorporated area in conjunction with the likely future supplies available. The second reason is that the Agency supplies water primarily to cities. Only a small portion of the unincorporated area of the County uses Agency water as part of its water supply. Only the Valley of the Moon Water District is an Agency contractor, and only the Larkfield/Wikiup, Penngrove, and Kenwood/Lawndale communities and the Forestville Water District are other Agency customers. The Airport Industrial Area receives water from the Town of Windsor, which is now an Agency contractor. Most of the unincorporated County is served by other special districts, small water companies, and individual wells. As a result, the Agency's UWMP provides only a partial glimpse into future water supplies relevant to Draft GP 2020. See also Master Response S (Water Supply).

Notwithstanding the fact that the 2005 UWMP is of limited applicability to Draft GP 2020 and its DEIR, the updated UWMP has been reviewed by the DEIR preparers to determine whether or not it would affect the conclusions of the DEIR. The result of that review is that the UWMP provides additional and updated information that should be reflected in the DEIR, but none of this new information results in a new impact or a change in the level of significance of the impacts of Draft GP 2020 on water supply or other related impacts. The new information is added to the DEIR and explained below.

The UWMP and the DEIR differ in their conclusions regarding the adequacy of Agency water supplies through the year 2020. The 2005 UWMP concluded that there will likely be enough water

to meet the demands of the Agency's contractors and customers through 2020 based on certain assumptions spelled out in the UWMP, which the Agency found to be reasonable. One of these assumptions was that the Agency will approve and implement its Water Project and secure in a timely manner the necessary increase in the amount of water it can divert annually from the Russian River under its water right permits from the State Water Resources Control Board in order to meet demands. See also Master Response Q (SCWA Water Project).

The DEIR takes a more cautious approach, identifying the future increase in releases of stored water and diversions from the Russian River as a significant concern, and concluding that there may not be sufficient Agency supplies available to meet Draft GP 2020's increased demand for water in the urban areas of the unincorporated County that depend on Agency water if the necessary increase in annual diversions is not obtained or is significantly delayed (see Impact #4.9-1). This approach does not imply that the SCWA assumptions are unreasonable. Rather, it reflects the fact that decisions related to these water supplies are not within the control of the County, will require multiple regulatory approvals, and will likely remain an uncertainty when considered over the entire planning period, which encompasses at least three more UWMPs. Because the DEIR was already cautious in its long range planning assumptions, the updated UWMP does not result in any new impacts or provide any new information that would give rise to the need for recirculation of the DEIR. See also Master Response G (SCWA Water Project) and Master Response G (Recirculation).

Based upon this recent UWMP, the existing Section 4.9 (Public Services) of the DEIR is revised as shown below.[1]

The last paragraph of Page #4.9-2 is revised as follows:

> The SCWA provides potable water to approximately 600,000 people in Sonoma and Marin Counties. Water is delivered, on a wholesale basis, to the SCWA's primary water customers through the SCWA's transmission system. The primary water customers, collectively known as the water contractors, consist of the cities of Santa Rosa, Rohnert Park, Petaluma, Cotati, and Sonoma, **the Town of Windsor,** and the North Marin~~,~~ **and** Valley of the Moon~~, and the Forestville~~ water districts. The SCWA supplies water to the water contractors under an agreement entitled "~~Eleventh Amended~~**Restructured** Agreement for Water Supply," which was originally executed in 1974 and most recently amended in ~~2001~~**2006**. The SCWA also provides water via the transmission system to other customers such as the Marin Municipal Water District, the **Forestville Water District** ~~Town of Windsor~~, and local water companies. The water contractors and other SCWA customers deliver water to customers through their own distribution systems. In addition to water supplied by the SCWA, many of the contractors use other sources such as groundwater wells.

In addition, the last two paragraph of Page #4.9-3 are revised as follows:

1) It should be noted that Exhibits #4.9-2, #4.9-4, and #4.9-6, which were also based on the 2000 UWMP, have not been revised to reflect the 2005 UWMP. Exhibit #4.9-2 shows the water use and demand for each of the Agency's water contractors. Because the Agency's contractors provide such a small portion of the unincorporated area water supply, updating this table is not necessary to understanding water supply for Draft GP 2020 growth and development. Exhibit #4.9-4 showing 2001 water use countywide was not modified by the updated UWMP. Exhibit #4.9-6 shows the conservation programs of the Agency's water contractors. This information was not updated in the 2005 UWMP and is of limited value in understanding Draft GP 2020 water supply because the water contractors primarily serve the Cities and their conservation programs are continually evolving over time. See also Master Response S (Water Supply).

The SCWA has estimated that by 2020 it will need to divert an additional ~~25,000 to 30,000~~ **21,000** acre feet of water annually from the Russian River at its Wohler-Mirabel diversion facilities, and release additional water from Lake Sonoma to support this additional diversion to supply projected increases in its contractors' demands. This additional diversion amount was estimated from the ~~2000~~ **2005** Urban Water Management Plan~~s~~ of the SCWA, ~~Marin Municipal Water District, and the Town of Windsor~~ and it includes reductions in demands resulting from projected water conservation savings and urban recycled water uses. The ~~current and~~ projected water supplies of the SCWA for multiple dry years, from both surface and groundwater, are presented in Exhibit 4.9.1. ~~A summary of current and projected water supply and demand for the SCWA's contractors is presented in Exhibit 4.9-2.~~ The demand projections are based on the adopted general plans of the individual contractors for their service areas and the existing General Plan.

The SCWA has adequate supplies to meet the projected increases in demands**, except in a "single dry year" scenario beginning in 2020**. The SCWA is the local sponsor of the Coyote Valley Dam / Lake Mendocino Project and the Warm Springs Dam / Lake Sonoma Project, which together are known as the Russian River Project. The SCWA paid the U.S. Army Corps of Engineers approximately $5,000,000 (in 1955 dollars) for the water supply benefits of the Coyote Valley Dam Project, and the SCWA is paying the Corps of Engineers a total of almost $100,000,000 for the water supply benefits of the Warm Springs Dam Project. These amounts have been and are being funded through property taxes paid by the residents of Sonoma County and through water charges paid by the customers of the North Marin and Marin Municipal Water Districts.

In addition, the third paragraph of Page #4.9-4 is revised as follows:

…from the Eel River into the Russian River, and various levels of demands by SCWA customers or other water users. Based on these hydrologic models, the **2000 Urban Water Management Plan** estimated **the** reliable water supply yield of the Russian River Project at the SCWA's Wohler Mirabel diversion facilities **at** ~~is~~ approximately 124,000 AFY. The **water supply available for diversion in 2020 at** SCWA's Russian River diversion~~s~~ **facilities** ~~in 2020~~ at Wohler-Mirabel **during a normal water year** ~~are~~ **is** estimated to be ~~between 85,000 and 90,000~~ **101,000** AFY **(Table #4-11; SCWA 2005 Urban Water Management Plan).** Thus, **based on the hydrologic models and assumptions specified in the 2005 Urban Water Management Plan,** the SCWA **has determined it** has adequate water supplies to meet its contractors' **and other customers'** projected 2020 demands.

In addition, Exhibit #4.9-1 on page #4.9-5 is replaced with the following table:

Exhibit 4.9-1 Projected SCWA Water Supplies (acre-feet per year); Multiple Dry Years

Water Supply Source	**2010**	**2015**	**2020**
SCWA Groundwater	3870	3870	3870
SCWA Surface Water	75,000	75,000	101,000
SCWA Supply	78,870	78,870	104,870
SCWA Projected Demand	77,511	78,853	92,036
Surplus	**1359**	**17**	**12834**

Source: 2005 Urban Water Management Plan, Sonoma County Water Agency; Tables 7.9, 7-12, 7-15, 4.3.

In summary, in both its 2000 and 2005 UWMP, the Agency shows that it will have adequate water supplies to meet its contractors' and other customers' projected 2020 demands. As explained at

the beginning of this Master Response, the DEIR for Draft GP 2020 took a more cautious approach and concluded that the adequacy of future water supplies from suppliers that depend upon Agency water is uncertain and therefore the potential impact of Draft GP 2020 demand on these supplies is significant and unavoidable. The updated 2005 UWMP does not change this conclusion.

Master Response Q
SCWA WATER PROJECT

A number of comments raised concerns about the impacts of the Water Supply, Transmission, and Reliability Project (Water Project) proposed by the Sonoma County Water Agency (Agency). As noted in the DEIR on page #4.9-4, this project proposes to increase releases from water supply storage in Lake Sonoma to the Russian River and expand the water transmission system to serve the current and future needs of the Agency's contractors and other water customers. The Agency is in the process of seeking approval from the State Water Resources Control Board to increase its water rights permit limits from 75,000 acre-feet per year to 101,000 acre-feet per year.

The Agency serves municipal water providers in Sonoma County as well as two water providers in Marin County. However, it is important to note that only a small portion of the unincorporated County is served by water from the Agency's system. These are primarily the Valley of the Moon Water District and the Forestville Water District, but also include the Airport/Larkfield-Wikiup, Kenwood, Lawndale, and Penngrove areas (See DEIR, Section 4-9). Thus, as noted on page #4.9-22 of the DEIR, only about 5 percent of the proposed increased diversions would serve growth and development in the unincorporated area. Also as noted on page #4.9-22, "in the unincorporated portions of the county, water supplies are almost entirely derived from groundwater via private groundwater wells and smaller municipalities and water districts that draw their supplies from local groundwater sources." Because the Water Project would primarily serve planned growth in the cities, it is also considered in the cumulative analysis in Section 6.0 of the DEIR.

The Water Project has a lengthy history, as described in Section 4.9 (Public Services) of the DEIR. As a Program EIR under CEQA, the Draft GP 2020 DEIR analyzes the broad impacts of all land uses and development under Draft GP 2020. The proposed Water Project is among the land uses and development addressed in the DEIR at a countywide level of detail. However, the Water Project is a project of the Agency and not the County of Sonoma and its impacts are being addressed by the Agency in detail as part of the Water Project's required environmental review. Nonetheless, as noted in many sections of the DEIR, the Water Project affects a number of impacts of the Draft GP 2020 in the unincorporated area, including:

- Water supply to serve future urban growth in the unincorporated area
- The municipal demand for groundwater resources
- The impacts of construction of water supply facilities needed to transmit water to customers
- Various fish and wildlife impacts

Following is a summary of the DEIR's discussion of these impacts. See also Master Response XX (Water Supply) and Master Response Q (Urban Water Management Plan).

Urban Water Supply: The DEIR, in Section 4.9, notes that future water supplies for retail water suppliers that will rely upon the Water Project to supply water to users in the unincorporated area in the future are uncertain. Although the Agency assumed in its 2005 Urban Water Management Plan that its request for additional diversion rights will be approved at some future date, the UWMP makes clear that this assumption might not come to pass. For this reason, the DEIR took the more conservative approach in identifying this as a significant concern due to its uncertainty. This

uncertainty is due in part to the fact that the County has no direct jurisdiction with respect to the Water Project. In addition, the UWMP is updated more frequently than the General Plan and is better able to incorporate changed circumstances than is the General Plan. Accordingly, the DEIR for the General Plan was more cautious in its assumptions.

Groundwater: In light of the uncertainty surrounding the approval of the Water Project, the Agency has alerted its customers of the following:

-The Agency and its contractors and customers may need to develop alternative supplies to the Water Project.

-Retail suppliers may need other sources of supply until the Water project is approved.

-Conservation will need to be relied upon more heavily in order to reduce demand.

-Summer flow impairments may increase, particularly in dry years.

-Increased use of recycled water to offset potable water use may be needed to reduce demand on surface water and groundwater.

This notification means that municipalities may elect to develop additional groundwater resources to meet demands, either temporarily as part of a strategy to deal with summer impairments or droughts, or as a longer term supply augmentation, or both. The potential increase in municipal use of groundwater is one of the reasons that the DEIR identified groundwater decline as a significant impact in Section 4.5 (Hydrology and Water Resources). In order to clarify this statement, the first paragraph under Impact #4.5-5 on page #4.5-50 is revised as follows:

> "Existing and future land uses and development in unincorporated areas ~~outside of the USA's~~ **not served by surface water** have and would continue to be highly dependent on individual groundwater wells and small ~~or independent~~ water companies that rely on groundwater as their primary source of water supply. **In addition, municipal water suppliers who currently rely in whole or in part upon surface water may need to increase reliance upon groundwater to meet their needs.**

Water Supply Facilities: The Water Project would also affect the types of facilities that will be needed in the future to deliver water to the Agency's customers. As noted in the discussion under Impact #4.9-3 in Section 4.9 (Public Services) of the DEIR, the exact nature and location of future facilities are unknown, but would include collectors, pipelines, and pumps. As noted in the DEIR, the facilities would likely result in impacts related to their construction (e.g., construction-related noise, dust, and grading) and operation (e.g., potential impacts to fish and wildlife, erosion, and stream flow) that would be addressed in appropriate detail when the specific projects are proposed and subjected to project-level environmental review.

Streamflows and Biological Resources: The DEIR acknowledges in Section 4.9 that the development of water supply facilities such as the Water Project may change streamflows and adversely affect fish and wildlife. The impacts of these future water supply facilities, including the Water Project, on special status species and other biological resources are analyzed in Section 4.6 (Biological Resources). However, the exact nature and extent of these impacts cannot be known until the details of the project's streamflow regime are identified; this information will be developed and analyzed by the Agency in the Water Project EIR.

In summary, the Agency's proposed Water Project would provide water for only a small portion of

the growth and development that would occur in the unincorporated area under Draft GP 2020. Because it is a future public project that would serve a portion of Draft GP 2020 growth and development, the Draft GP 2020 DEIR includes the Water Project among the land uses and development under Draft GP 2020, and analyzes it at a programmatic level of detail appropriate for a General Plan EIR. At the same time, because the Water Project would primarily serve planned growth and development in the cities, it is also considered in the cumulative analysis, as described on page #6.0-4 of the DEIR. A more detailed analysis of the Water Project's potential impacts is being undertaken in the Agency's EIR for the Water Project. See also Master Response C (Program EIR/Level of Detail) and Master Response S (Water Supply).

Master Response R
GROUNDWATER MANAGEMENT

Numerous comments criticized the DEIR's treatment of the impacts of Draft GP 2020 land uses and development on groundwater. Comments varied, but identified the general concerns discussed below regarding the lack of certain information in the DEIR and the lack of sufficient mitigation measures to address the impacts of Draft GP 2020.

In terms of information about groundwater conditions, comments stated that the DEIR did not identify all of the past studies of groundwater resources in various parts of the County or all the areas of groundwater decline. Comments also stated that the DEIR did not provide estimates of recharge rates and sustainable yields in the groundwater basins of the County, or the effects of increased reliance on groundwater by individual wells and municipal water suppliers.

Regarding additional mitigation measures for groundwater impacts, comments suggested that the County not adopt Draft GP 2020 until it completes either a countywide groundwater management plan(s), or adopts a moratorium on new wells that would remain in place until such plan(s) are approved. They also suggested mitigation measures including updated groundwater classification maps and discretionary approval for all wells. Finally, comments suggested that the Draft GP 2020 include additional ways to reduce groundwater demands.

With respect to the information regarding groundwater conditions in the County, the DEIR preparers evaluated available reports regarding groundwater conditions in the County and concluded that more comprehensive information is necessary before reliable conclusions could be drawn about the impacts of Draft GP 2020 land uses and development. While the comments cite numerous letters, opinions, well logs, reports, and similar documents on the subject of groundwater in Sonoma County and California, this information is not adequate to either determine the impacts of future uses on groundwater supplies or to justify specific management requirements to address those impacts.

For example, many comments cite the 2001 studies conducted by Kleinfelder, Inc. for three water scarce areas in the County as proof of overdraft conditions in those areas. However, although the Kleinfelder report, discussed on page #4.5-28 of the DEIR, identifies groundwater decline over several decades in the three study areas, it concludes by stating that additional data are necessary not only to verify the cause of the declines, but also to determine what, if any, remedial action should be taken. Also, State Department of Water Resources (DWR) studies in the 1970s and 1980s identified the conditions of various groundwater basins in the County. For example, the DWR Bulletin #118-4 study cited in the DEIR identified a net decline in groundwater levels in the South Santa Rosa Plain from the 1950s through the early 1980s. The DWR studies represent the only comprehensive studies of the basin, but they are decades old and, as noted in the DEIR, need to be updated to determine current conditions. The Groundwater Study for the Canon Manor West Subdivision Assessment District conducted by Todd Engineers in 2004, also cited in the DEIR,

confirmed the historical decline in the South Santa Rosa Plain described in the DWR Bulletin but concluded that groundwater levels in this area have stabilized and even increased somewhat since then. Like the Kleinfelder report, however, the Todd Engineers report emphasized that comprehensive monitoring and additional investigation of the groundwater basin was necessary to understand the groundwater system before groundwater management would be appropriate.

The other information cited in the comments, such as those identified in the "Index to Exhibits" to comment letter #228, consist of additional opinions, letters, articles and other general correspondence related to groundwater issues that add little new data regarding the actual groundwater conditions in the County that would enable the DEIR preparers or decision makers to better assess the impacts of Draft GP 2020. Some of these data, particularly well logs and well monitoring reports, may very well prove important in future assessments of groundwater conditions, but they are not useful to the DEIR preparers until they are analyzed in a more comprehensive assessment of the applicable basin. Also, the fact that the County has cooperated with some of the public water suppliers to initiate comprehensive studies of certain groundwater basins means that these data can be evaluated and considered in the proper context.

The DEIR acknowledges that the available studies do not shed enough light on the groundwater conditions either in the major basins or in areas outside of groundwater basins dominated by bedrock rather than alluvial aquifers. As a result, the conclusion that groundwater conditions are uncertain is appropriate. Neither California land use planning law nor CEQA require the County to prepare a comprehensive groundwater availability study as part of the environmental review process before updating its General Plan. Draft GP 2020 includes a new Water Resources Element that, among other policies, includes a three part strategy to determine appropriate actions to improve understanding and management of groundwater resources. The first step is to improve the available knowledge and understanding of groundwater conditions in the groundwater basins and the bedrock dominated areas. The second step is to report on a regular basis the results of groundwater data. The third step is to utilize this information to select and implement appropriate management actions. Policies WR-2i and WR-2j are the key policies to accomplish these steps.

Since there are areas of the County that appear to have relatively abundant groundwater, as well as areas where groundwater levels either have declined or are declining, a countywide groundwater management plan is premature. Additionally, it is unlikely a countywide plan would prove practical, since several basins and bedrock areas have significant differences. For this reason, a groundwater management plan customarily relates to a specific groundwater basin. Calls for either a development restriction or well permit restriction are also premature, given that the scientific and legal basis for such restrictions has not been established. AB 3030 plans, groundwater ordinances, and other steps may be appropriate when the scientific data are available. These additional data will also prove useful in updating of the County's water classification maps as provided in the Water Resources Element.

AB 3030 groundwater management plans developed under the authority of the California Water Code (10750 *et seq.),* must be developed following statutory procedures. These procedures require public participation in the development of plans and their environmental review. The Water Code lays out both the potential elements of a plan and, more importantly, the limitations on their development. First, the Code requires that the local agency that adopts the plan be a water provider. Second, the local agency cannot limit extraction unless all other management measures are determined to be infeasible. Third, extraction or replenishment fees cannot be imposed unless approved by the voters within the plan area.

In order for Sonoma County to initiate an AB 3030 groundwater management plan, it must either partner with a water provider that has the jurisdiction to adopt the plan or obtain State legislation to

create a qualified entity to carry it out. For this reason, the adoption of an AB 3030 plan by the County is not feasible at this time. Sonoma County could adopt groundwater regulations via ordinance using its police powers, provided that sufficient information is available to justify such regulations. However, since that information threshold has not been reached, Draft GP 2020 is focused on gathering the necessary information to determine whether a regulation or other management action is justified.

Several comments stated that the DEIR neither identifies the demand for groundwater resulting from Draft GP 2020 land uses and development nor identifies appropriate mitigation measures to reduce future groundwater demand in light of the uncertainty of groundwater conditions. Contrary to these comments, the DEIR identifies future water demand and policies that will reduce demand through conservation and re-use.

Section 4.9 (Public Services) of the DEIR identifies the projected future demand for groundwater (as well as surface water) supplies under Impacts #4.9-1 and #4.9-2. The background discussion in this section also provides an estimate of future demand from the County's public water suppliers, from those entities relying upon the Sonoma County Water Agency, from agricultural use, and from residential wells. (See also Master Response S (Water Supply) for clarification regarding future demand for groundwater in the unincorporated area.)

The DEIR also identifies numerous goals, objectives, and policies that would reduce future groundwater demand. First, the city and urban centered land use policies of the Draft GP 2020 Land Use Element, analyzed in Section 4.1 (Land Use, Population, and Housing) of the DEIR, would reduce future groundwater demand by limiting rural development. In addition, Section 3.4 of the Draft GP 2020 Water Resources Element includes goals, objectives, and policies that support use of recycled water and that promote and implement water conservation measures for future land uses and development. In combination, these measures will reduce and offset future groundwater demand in the unincorporated area.

Section 4.5 (Hydrology and Water Resources) of the DEIR analyzes the potential declines in groundwater levels from increased demand under Draft GP 2020, as well as the potential for well competition and adverse well interference from increased pumping in the unincorporated area. Sonoma County has increased its groundwater protection efforts in recent years, including several actions since the preparation of the DEIR. The County has upgraded its well permit standards to require longer pumping tests and higher production standards. In addition, the existing groundwater monitoring program for commercial and industrial wells has been improved to establish an organized data collection and reporting protocol. At the broader planning level, groundwater basin studies in Sonoma Valley and Alexander Valley have been completed, and a $1.95 million study for the Santa Rosa Plain has been initiated and is progressing under the expert guidance of the Water Agency and USGS, with support from the County, as well as cities and other public water suppliers. The study in Sonoma Valley has resulted in the initiation of an AB 3030 non-regulatory groundwater management plan in that area. The plan will focus on monitoring groundwater conditions to establish the sustainable yield of the basin, and appropriate measures implemented by the water suppliers and the County to promote conservation, improve efficiency, and assure that appropriate groundwater management measures are utilized to maintain the resource over the long term.

In summary, the DEIR provides an appropriate plan level description of existing groundwater conditions in the County, an analysis of the likely impacts on groundwater of growth and development under Draft GP 2020, and mitigation measures to reduce impacts to the extent feasible, given available information. The proposed new Water Resources Element in Draft GP 2020 establishes the policy framework for additional investigation, monitoring, and management to

better understand and protect the County's water resources, including the groundwater that sustains the majority of the unincorporated area.

Master Response S
Water Supply

Many comments questioned the adequacy of the DEIR's analysis of future water demand and supplies for land uses and development under Draft GP 2020 and the impacts of developing and utilizing those sources. In addition, since publication of the DEIR, the Supreme Court's decision in *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412 provided additional guidance regarding the discussion of water supply in EIRs for development projects. This Master Response clarifies and amplifies the discussion of water supply provided in the DEIR.

EIRs for development projects must identify the water demand and source of supply, and must disclose, analyze, and mitigate the potential impacts of developing and utilizing these sources. Where it is impossible to confidently determine that anticipated future water sources will be available, an EIR must provide some discussion of possible alternative supply sources, and the environmental consequences of utilizing them. The burden of identifying likely water sources varies with the stage of project approval involved. The necessary degree of confidence involved for issuance of a building permit is much higher than for approval of a conceptual plan.

A General Plan is the most conceptual stage of project approval. The General Plan does not approve any specific construction or other development projects, but rather sets the goals and policies for guiding future land use decisions. This Draft GP 2020 does not propose any major changes to existing land use designations, or contemplate a change from the County's existing pattern of city-centered development. Draft GP 2020 thus anticipates that as future development projects are proposed, additional site specific CEQA review will be undertaken to identify specific water supply sources, impacts, and mitigation measures.

Draft GP 2020 does identify, at a plan level of detail, future land uses that would increase water demand. This Master Response summarizes and clarifies the future water demands under Draft GP 2020, the sources of water to serve these demands, the likely impacts of developing and utilizing these sources, and the measures to mitigate likely impacts.

In considering future water demands and supplies, it is important to distinguish between future water demands arising in the unincorporated area of Sonoma County and those arising in incorporated cities in Sonoma County and in Marin County water districts that are customers of the Sonoma County Water Agency (Agency). Implementation of Draft GP 2020 would result in increased demand for water only in the unincorporated area of the County. However, the DEIR references future incorporated area demands because those demands may affect the supplies available to serve unincorporated area demands, constructing projects to serve those demands may have impacts in the unincorporated areas, and growth in the unincorporated area together with growth in the incorporated areas will have cumulative environmental impacts. However, the proper focus of the DEIR's analysis is the water demand and supply for growth and development that would occur in the unincorporated area under Draft GP 2020.

Projected Water Demand from Draft GP 2020 Land Uses and Development

Section 4.9 (Public Services) of the DEIR identifies the base year water use and projected water demand from Draft GP 2020 land uses and development. The DEIR explains that these estimates are subject to high variability due to factors independent of Draft GP 2020, including climate,

delivery cost, water availability, and predominant land uses in different parts of the County. For example, in an area designated by Draft GP 2020 for agricultural production, a drip irrigated vineyard would use less water than a flood irrigated orchard. Similarly, in an area designated by Draft GP 2020 for commercial uses, an RV storage lot would use less water than a hotel.

Base Year Water Use:

Section 4.9 (Public Services) of the DEIR, in Exhibit #4.9-4, estimated total Countywide base year water use at 183,000 acre feet per year (AF/YR). This figure overstated agricultural water use, and has been modified in response to comment #219-19 to include a more accurate estimate. The DEIR now estimates total countywide base year water use at 166,600 AF/YR. The DEIR notes that base year water use cannot be stated precisely because not all of the cities, water districts, and private water companies in Sonoma County reliably report annual water usage, and limited data exists regarding individual or small community wells for residential, agricultural, commercial, or industrial uses. It is not feasible to accurately state the base year water use in the unincorporated area, for the reasons identified above. Although the DEIR estimates that 40,000 wells exist in the County, no data identifies how many of them are located in the unincorporated area versus incorporated areas. Similarly, no data identifies how much Agency water is supplied to the unincorporated area. For example, the South Santa Rosa area is characterized by incorporated neighborhoods intermixed with unincorporated areas, and water use split between City water from the Agency system and groundwater from individual wells. Determining unincorporated base year water use would require an exhaustive study to determine how many parcels in incorporated areas draw water from private wells, and how much Agency water is used in the unincorporated area. Such a study is infeasible due to the time, money, and access to property that would be required.

Projected Water Demand for 2020:

The DEIR explains that by 2020, land uses and development consistent with Draft GP 2020 would result in an increase of 32,110 AF/YR in the water demand for the rural unincorporated area. As explained on DEIR pages 4.9-29 and 4.9-30, this figure was calculated by adding the estimated future unincorporated residential water demand of 3,210 AF/YR to the estimated future vineyard demand of 15,900 AF/YR and the estimated future demand for other agricultural crops of 13,000 AF/YR, resulting in a total demand of 32,110 AF/YR. This figure did not include all of the demand from future commercial and industrial uses in the unincorporated area. It also did not account for the use of water by new wineries projected under Draft GP 2020.

It is not possible to precisely determine the water demand of future commercial and industrial uses, since those uses vary and can have significantly different individual water demands. However, most future unincorporated commercial and industrial uses would likely be located in areas that receive water from the Sonoma County Water Agency, such as the Airport Industrial Area, Larkfield/Wikiup, Sonoma Valley, and Forestville. Using figures from the Agency's 2005 Urban Water Management Plan, these communities would require an additional 1,326 AF/YR in Agency water by 2020. This figure includes future residential water demand in these communities, as well as future commercial and industrial uses. Although the DEIR's estimate of 32,110 AF/YR already included future residential water demand in these communities, the entire 1,326 AF/YR figure has been added to provide a safe margin for error in future commercial and industrial water demand.

Water demand from future wineries was calculated by multiplying a water use figure of 3 gallons of water used for each gallon of wine produced, based upon figures from the EIR for the Gallo of Sonoma Winery Expansion, by an estimated increase in annual production from approximately 17 million cases to approximately 33 million cases of wine, based upon PRMD's analysis of wine grape and winery growth for the DEIR. This results in a projected increase in water demand of 341 AF/YR

(from 384 AF/YR in 2000 to 725 AF/YR in 2020).

These additional demands would result in a total increase in water demand for the unincorporated area under Draft GP 2020 of 33,777 AF/YR.

Projected Sources of Water

The DEIR explains that under Draft GP 2020, land uses and development in unincorporated areas will primarily rely on groundwater. The DEIR also identifies surface water, recycled water, and conserved water as sources for land uses and development consistent with Draft GP 2020.

Groundwater:

Groundwater is the primary supply source for the unincorporated area, and is expected to continue to be the primary source for Draft GP 2020 land uses. Rural land uses, from single family homes to vineyards and other agricultural uses, will continue to rely upon individual wells to meet their water needs. Most unincorporated communities served by independent public and private water suppliers, such as Bodega Bay and Geyserville, will also use groundwater.

Urban water providers (such as the Cities of Rohnert Park and Petaluma and some unincorporated communities listed below) that rely primarily upon surface water from the Russian River also have groundwater sources as part of their supply, some of which are located in unincorporated areas. In addition, the Cities of Cloverdale and Healdsburg draw water from wells close to the Russian River that likely draw on subsurface streamflow as well as groundwater. The City of Sebastopol also uses groundwater.

Surface Water:

The DEIR assumes that the Agency will continue to provide surface water from the Agency's Russian River Water System to its customers in the unincorporated area, in accordance with the Agency's 2005 Urban Water Management Plan. See also Master Response E (Urban Water Management Plans). The Agency's principal supply is surface water, although it also provides some groundwater. The Agency provides water to the Valley of the Moon Water District (serving Sonoma Valley), and the unincorporated areas of Forestville, Penngrove, Kenwood/Lawndale, and Larkfield/Wikiup. The Airport Industrial Area also receives water from the Agency through the Town of Windsor. The South Santa Rosa area, currently in the unincorporated area but proposed for annexation, also receives water from the Agency through the City of Santa Rosa. As noted, some of these areas will also continue to rely in part upon groundwater sources.

Surface water supplies may also include additional water from the Agency's proposed Water Project. As noted under Impact #4.9-1 of the DEIR, only about 5% of water from the Water Project would serve the unincorporated portion of the County. The Water Project is discussed in detail in Section 4.9 of the DEIR, and in Master Response G (SCWA Water Project).

Some additional water supply is derived from constructed ponds, reservoirs, and similar seasonal surface water diversions, mostly for agriculture under appropriations regulated by the State Water Resources Control Board. The DEIR accounts for these diversions in its water use estimates for agriculture, in Exhibit #4.9-4 (as revised).

In addition, the DEIR anticipates that the Cities of Cotati, Petaluma, Rohnert Park, Sonoma, and Santa Rosa will continue to rely primarily on surface water from the Agency. The North Marin Water District and the Marin Municipal Water District will also partially rely on this source of water.

The Town of Windsor will rely on Agency water in addition to its own surface water diversions (under the Agency's water rights) and groundwater supplies.

Recycled Water:

Recycled water is likely to be one of the sources of the additional supply serving growth and development under Draft GP 2020. The DEIR notes on page #4.9-16 and Exhibit #4.9-7 several City and Special District projects that would use recycled water for irrigation, in order to reduce peak summer demands and the need for additional surface water or groundwater sources. Since publication of the DEIR, the Sonoma Valley County Sanitation District has approved a project to provide up to approximately 2,750 acre-feet per year of recycled water to users in the northern, western, and eastern portions of Sonoma Valley to offset groundwater use for potable or agricultural purposes. The Agency and Federal Bureau of Reclamation have similarly proposed to construct and operate a project to store and distribute up to 21,134 acre-feet per year of recycled water to agricultural lands within the Russian River, Dry Creek, and Alexander Valleys to offset use of natural regional water supplies. Similarly, the Russian River County Sanitation District has proposed to construct and operate a project to distribute recycled water to existing agricultural, municipal, and other allowable users in the Russian River Valley and Green Valley areas, with preference to users that would offset existing surface water diversions and use of groundwater. The Agency is also considering options to provide reliable treatment, storage, and disposal of recycled water in the Sea Ranch Sanitation Zone, potentially including the expansion of the local, four-acre irrigation disposal area.[2]

Water Conservation:

Water conservation is also expected to play an important role in serving the Draft GP 2020 demand. The DEIR notes on page #4.9-12 that the SCWA has employed fourteen water conservation Best Management Practices since 1982, and recently developed a Water Conservation Plan that identifies additional measures and designates approximately $1.5 million annually to implement them. The DEIR also discusses at length water conservation programs adopted by other public water suppliers in the County, on page #4.9-12 and Exhibit #4.9-6. Draft GP 2020 also includes Section 3.4 of the Water Resources Element that calls for substantial water conservation efforts in the unincorporated area.

Supply Projections by Source:

The DEIR did not attempt to quantify how much any particular well or other water source would contribute to meeting the Draft GP 2020 water demand, due to uncertainty about the location and availability of future water supplies. Section 4.9 (Public Services) of the DEIR notes the uncertainty regarding the availability of future supplies from the SCWA Water Project. Additional uncertainty results from an inability to differentiate between groundwater and surface water in areas along streams. Depending upon the specific geologic characteristics of the site, a streamside well may draw either water that can be legally characterized as groundwater, or stream underflow that may be legally considered surface water. No study exists that comprehensively identifies the water source for every well in the County, and such a study remains infeasible due to the time, money and access to property that would be required. Moreover, it is unlikely that a study alone would result in a determination acceptable to all parties, given the legal conclusions that would be required and the

2 Although these specific projects were not known at the time the DEIR was published, the DEIR anticipated future projects of this type and analyzed the program-level impacts of all potential future recycled water projects. The identification of these specific projects thus would not change the DEIR's conclusions.

fact that the state does not generally regulate the use of groundwater but may require permits for the diversion of surface water.

It therefore remains impossible to precisely determine how much each water source in the County would contribute to meeting the Draft GP 2020 water demand and how many additional wells or other sources would need to be developed. The DEIR identifies all likely future water supplies and includes a reasoned analysis of the circumstances affecting the likelihood of each source's availability. The DEIR further analyzes, to the extent reasonably possible, the environmental impacts of developing and utilizing these sources to meet the water demand of Draft GP 2020, as summarized below.

The Impacts of Developing and Utilizing Projected Water Sources

The development and use of the available water sources would result in impacts to a number of environmental resources. Chapter 4 and Section 6.2 of the DEIR disclose, analyze, and propose mitigation for all direct water supply impacts, as well as all indirect and cumulative impacts of future projects that may be necessary to supply communities throughout the County, including projects that have not yet been defined or located. Section 4.5 (Hydrology and Water Resources) of the DEIR identifies the impacts of these projects on water resources. Section 4.6 (Biological Resources) of the DEIR analyzes and mitigates impacts to special status species, including coho salmon, steelhead trout, and Chinook salmon. In addition, Section 4.9 (Public Services) identifies and analyzes the impacts of new or expanded water supply facilities under Impacts #4.9-3 and #4.9-4. See also Master Response G (SCWA Water Project).

Groundwater:

The DEIR explains that the development and utilization of groundwater supplies to meet the above projected demand would cause several potentially significant impacts, including groundwater level decline, saltwater intrusion, well competition, and adverse well interference. The DEIR analyzes these impacts at length, and imposes all feasible mitigation measures to reduce or eliminate them.

The DEIR further explains that the full extent of potential groundwater impacts is uncertain, due to several factors. First, the beneficial effects of existing and new Draft GP 2020 water conservation policies cannot be quantified until the policies have time to take effect. Second, the groundwater conditions that determine the availability of groundwater supplies are unknown for many parts of the County, particularly in areas where groundwater is stored in fractured bedrock. While some data and studies are available, and new studies are underway, they are not sufficient to determine on a comprehensive basis how much groundwater can be extracted, and where, without exceeding recharge rates within the major basins or isolated groundwater deposits. (See Master Response R (Groundwater Management).) Third, the plan level Draft GP 2020 cannot determine where water providers may decide to construct new wells, and which groundwater basins or deposits applicants would propose to tap.

The DEIR and Draft GP 2020 propose measures to mitigate groundwater impacts in light of these uncertainties. The Draft GP 2020 Water Resources Element proposes to initiate a comprehensive program to systematically collect information on groundwater conditions, report the data collected, identify problem areas, and initiate appropriate remedial actions to address problems. In fact, the data collection has begun with the conduct of several studies of the groundwater basins in cooperation with public water suppliers, and the USGS. (See Master Response R (Groundwater Management).) Draft GP 2020 would further impose new requirements for all permits to dig, replace, deepen, or repair wells, including new setback limitations and requirements that applicants in Class III and Class IV areas prove that local groundwater quantity and quality would be sufficient

for proposed uses and existing beneficial uses. Draft GP 2020 would impose several additional mitigation measures, including requiring discretionary projects to maintain or increase the site's pre-development absorption of runoff to recharge groundwater to the maximum extent practicable.

Surface Water:

As noted above, groundwater is expected to be the primary water source for land use and development in the unincorporated area under Draft GP 2020. The DEIR assumes that the Agency will continue to provide water to its customers in the unincorporated area, the Valley of the Moon Water District (serving Sonoma Valley), Forestville, Penngrove, Kenwood/Lawndale, Larkfield/Wikiup, and the Airport Industrial Area through the Town of Windsor. The DEIR identifies all existing limitations on this source, including uncertainties regarding diversions from the Eel River to the Russian River that are currently authorized by the Federal Energy Regulatory Commission ("FERC"), and analyzes any impacts that might be caused by implementation of Draft GP 2020.

The DEIR also analyzes program level impacts that would result from implementation of SCWA Water Project. The DEIR notes that the Water Project would increase Russian River diversions by 26,000 AF/YR, and that only about 5 percent of this increase would be allotted to unincorporated areas. Following a successful legal challenge to the Agency's EIR for the Water Project, the Agency has issued a Notice of Preparation for a new EIR that will analyze a number of alternatives to address current circumstances. These alternatives may include continued use of the Russian River and Dry Creek to convey water at current or different flow rates, the construction of a bypass pipeline from Warm Springs Dam to the Russian River, conjunctive use of surface and groundwater, such as aquifer storage and recovery, and others. Draft GP 2020 will not approve or authorize any of the alternatives under consideration by SCWA, and the County has a limited ability to regulate any future water projects carried out by other public entities. Although public agencies such as the Agency must submit water supply projects to the County for General Plan consistency determinations, and must analyze any General Plan inconsistencies under CEQA, these entities may reject any mitigation measures recommended by the County and may override any finding of General Plan inconsistency.

The DEIR for Draft GP 2020 nevertheless discloses and analyzes the program level impacts of a potential future Water Project, and all other potential future water supply facilities, under Impact #4.9-3. The DEIR discloses that these projects would likely cause construction-related noise, dust, and grading impacts, as well as adverse effects to fish and wildlife, erosion, and stream flow. The DEIR notes that Draft GP 2020 contains policies that would reduce some of these environmental impacts, including specific measures to limit potential construction impacts and policies requiring the County to support the efforts of public water suppliers to meet future demands while protecting the natural environment. The DEIR concludes that these impacts would remain significant and unavoidable at a program level, but would be further evaluated and mitigated in separate environmental reviews for each individual project. See also Master Response Q (SCWA Water Project).

Recycled Water:

Although Draft GP 2020 would not approve or authorize any specific recycled water project, the DEIR analyzes the program level impacts of all such potential future projects under Impact #4.5-4. The DEIR notes that the County would be responsible for the water quality of discharges at plants it operates, and would have a cooperating and coordinating role with plants not directly operated by the County. The DEIR discloses that excessive application of recycled water could lead to runoff that enters waterways, causing potentially significant impacts.

Draft GP 2020 includes goals, objectives, and policies to mitigate these impacts. Policy WR-4j would help ensure that public wastewater disposal systems are designed to reuse recycled water to the extent practicable, provided that the water meets applicable water quality standards and is supplied in appropriate quantities. Goal WR-4 and Objective WR-4.1 would similarly encourage the use of recycled water to meet urban and rural water demands, so long as the water meets all applicable regulatory standards and is the appropriate quality and quantity for the intended use. These measures would help reduce the potential for water quality and other impacts to a less than significant level.

Water Conservation:

The DEIR notes that SCWA and other agencies are already implementing water conservation measures and will continue to do so regardless of adoption or implementation of Draft GP 2020. In addition, Draft GP 2020 includes water conservation policies to reduce the water demand of future growth and development in the unincorporated County. These conservation measures confer environmental benefits rather than impacts, by reducing demand and offsetting the use of potable groundwater, surface water, and other supplies.

Future Changes in Available Sources:

The water sources identified in the above discussion are interconnected, and the impacts of Draft GP 2020 on specific water sources could be altered if projected sources change. For example, if the projected surface water supplies from the Agency's Water Project are not available, groundwater sources will likely be used to make up the difference, causing additional groundwater impacts but reducing surface water impacts. Similarly, if implementation of the Water Project resulted in the provision of additional surface water supplies to unincorporated areas, groundwater impacts could be less than those stated in the DEIR. An increase or decrease in water demand, for example by increased water conservation efforts or the use of recycled water, could likewise affect the amount of surface or groundwater used and the degree of impacts associated with their use.

Further Mitigation

CEQA provides that when an EIR makes a sincere and reasoned attempt to analyze the water sources a project is likely to use, and acknowledges any remaining uncertainty, measures for curtailing development if the intended sources fail to materialize may play a role in the impact analysis.

The DEIR contemplates such measures here. For example, Draft GP 2020 Policy WR-2c would add new requirements for all ministerial permits to drill, replace, deepen, or repair wells. In areas with marginal groundwater availability (Class III), or low or highly variable water yield (Class IV), the policy would require proof that local groundwater quantity would suffice for the proposed uses and existing beneficial uses. Draft GP 2020 Policy WR-2d would similarly require discretionary projects in Class III and Class IV areas to prove that groundwater would suffice to support proposed uses. Draft GP 2020 Policy WR-3i would support the development of master facilities plans by water providers under the principle of sustainable yield. If a master plan or monitoring fails to show adequate supplies for planned growth, Policy WR-3i would call for County consideration of moratoria on plan amendments, zoning changes, building permits, or other entitlements. Draft GP 2020 thus includes measures allowing the County to exercise its land use authority to curtail development when a likely future water supply source cannot be identified.

Master Response T
LISTING OF IMPAIRED WATER BODIES

Several comments point out that the DEIR listing of Impaired Water Bodies in Sonoma County does not reflect current information from the State Water Resources Control Board. Section 4.5 of the DEIR provides the environmental setting for the Hydrology and Water Resources beginning on page #4.5-1 under "Sonoma County Watersheds". This text, in addition to Exhibits #4.5-2 and #4.5-3, identifies the impaired water bodies in each watershed as approved by the Environmental Protection Agency (EPA) in 2003. This text and exhibits are revised as follows in order to reflect the most current EPA listing. The revised listing of impaired water bodies does not significantly change the water quality impact analysis of Draft GP 2020 because the DEIR evaluates the water quality impacts at a countywide level of detail appropriate for a General Plan and, as noted in the discussion at the beginning of Impact #4.5-1 on page #4,5-41, already acknowledges that most of the major streams in the county have been characterized as impaired. Existing and pending water quality regulations such as TMDLs are responsive to the identified impairments and are addressed by the applicable Regional Water Quality Control Board as necessary. Draft GP 2020 policies and programs such as riparian corridor protection are based upon broader stream protection that is effective for the full range of impairments.

Exhibit 4.5-2
Summary of Sonoma County Watersheds and Subbasins

Watershed	***Impaired Water Body*** [a]	***Land Use*** [b]	***Hydrological Issues***
North Coast *49 square miles*	No	70% Rural 21% Park/Recreation Area 9% Agricultural	Sea cliff / bluff retreat Upland gully erosion Stream bank failure
Gualala River *269 square miles*	Yes	99% Rural (timber & grazing)	Excessive sedimentation & siltation due to habitat modification and erosion of unpaved roads.
Russian River *1,485 square miles* *(921 sq. mi. in Sonoma County)*	Yes		Sedimentation & siltation due to grazing, agriculture, road construction, & habitat modification.
Russian River Subbasin *237 square miles*	**Yes**	61% Rural 32% Agricultural 4% Park/Recreation Areas	Flooding, bank erosion, streambed downcutting, elevated bacterial levels, hillside vineyards, and Gravel mining.
Austin Creek Subbasin *70 square miles*	**Yes**	93% Rural 7% Park/Recreation Areas	Erosion along roads

Watershed	*Impaired Water Body* [a]	*Land Use* [b]	*Hydrological Issues*
Dry Creek Subbasin *175 square miles*	**Yes**	57% Rural 20% Agricultural (vineyards & orchards) 12% Recreational 10% Commercial/Industrial	Erosion along roads, vineyards & orchards Creek bank instability Loss of riparian habitat
Big Sulphur Creek Subbasin *80 square miles*	**Yes**	97% Rural 3% Agricultural	Erosion along unpaved roads Erosion after wildfires
Maacama Creek Subbasin *69 square miles*	**Yes**	44% Rural 46% Agricultural 7% Commercial/Industrial	
Santa Rosa Creek Subbasin *81 square miles*	Yes	38% Rural 35% Urban 18% Agricultural 8% Park / Recreation Areas	Urbanization (water quality and stormwater runoff) Bank stability, fisheries, and riparian restoration.
Laguna de Santa Rosa Subbasin *89 square miles*	Yes	17% Urban 44% Agricultural 33% Rural	Flooding in the lower reaches Siltation and shallowing causing loss of floodplain storage and flood conveyance capacity. Water quality and biological resources.
Mark West Subbasin *83 square miles*	Yes	55% Rural 29% Agricultural 11% Urban	Low gradients in lower reaches result in some flooding.
Green Valley Subbasin *37 square miles*	Yes	56% Agricultural 39% Rural	Inadequate channel capacities along Atascadero Creek cause flooding problems. Expansion of two large rock quarries has potentially impacted water quality and salmonid habitat.
Sonoma Creek *170 square miles*	Yes	54% Agricultural 30% Rural 11% Park/Recreation Areas	Flooding, stream bank erosion, riparian & fisheries habitat, water diversions, & groundwater pumping Sedimentation, nutrients, & pathogens
Estero Americano *50 sq. mi. in Sonoma County*	Yes	Rural, very little development	Gully erosion, stream bank instability

Watershed	*Impaired Water Body* [a]	*Land Use* [b]	*Hydrological Issues*
Petaluma River *146 square miles* *(112 sq. mi. in Sonoma County)*	Yes	Mainly agricultural	Flooding Sedimentation/siltation, nutrients, & pathogens
Stemple Creek *22 sq. mi. in Sonoma County*	Yes	91% Agricultural 8% Park/Recreation Areas	High nutrient levels
Salmon Creek *37 square miles*	No	51% Agricultural 47% Rural	Gully erosion, stream bank instability
South Coast *9 square miles*	No	79% Agricultural 17% Park/Recreation Areas	N/A

a. The term *Impaired Water Body* refers to waters that are not attaining water quality standards set forth by the Environmental Protection Agency and regulated by the State Water Resources Control Board (SWRCB).

b. Land use percentages by watershed were derived from *General Plan Land Use Data* (ArcView 3.2 Shapefile format) provided by the Sonoma County PRMD. This information reflects existing land use designations in the existing *General Plan* and is based on scanned Assessor Parcel Maps. The land use categories presented in Exhibit 4.5–2 include the following General Plan land use categories found in the original data set:

Rural = Resources and Rural Development (RRD) and Rural Residential (RR) This category includes timber, grazing, and open space.

Urban = Urban Residential (UR), and City

Agricultural = Diverse Agriculture (DA), Land Extensive Agriculture (LEA), and Land Intensive Agriculture (LIA).

Park/Recreation Area = Recreation and Visitor-Serving Commercial (RVSC), Public / Quasi-Public (PQP), and River (RIV).

Commercial/Industrial = General Commercial (GC), Limited Commercial (LC), General Industrial (GI), and Limited Industrial (LI).

Source: Information compiled by Questa Engineering Corporation/PRMD

Exhibit 4.5-3
Sonoma County 303(d) List (2003, EPA)

Waterway	*Pollutant / Stressor*	*Priority*	*Source*
Americano Creek	**Nutrients**	**Low**	**Pasture grazing- riparian, range grazing-upland, intensive animal feeding operations, manure lagoons, dairies**
Estero Americano	Nutrients	Medium	Pasture land; manure lagoons

Waterway	*Pollutant / Stressor*	*Priority*	*Source*
	Sedimentation / Siltation	~~Medium~~ **Low**	Grazing; hydromodification[a]; removal of riparian vegetation; streambank modification/ destabilization; erosion/siltation; non-point sources[b]
Gualala River	Sedimentation / Siltation	High	Specialty crop production; silviculture[c]; harvesting; restoration; residue management; logging road[c] construction/maintenance; road construction; land development; disturbed sites; erosion/siltation; non- point sources
	Temperature	**Low**	**Riparian vegetation removal, streambank modifications, erosion, non-point sources**
Laguna de Santa Rosa	**Low Dissolved Oxygen**	**Low**	**Internal nutrient cycling, nonpoint source, point source**
	Nitrogen	**Low**	**Internal nutrient cycling, nonpoint source, point source**
	Phosphorus	**Low**	**Internal nutrient cycling, nonpoint source, point source**
	Sedimentation/ Siltation	**Medium**	**Road construction, land development, disturbed sites, urban runoff/storm sewers, other urban runoff, highway/road/bridge runoff, hydromodification, channelization, removal of riparian vegetation, streambank modification/destabilization, drainage/filling of wetlands, channel erosion, erosion/siltation, erosion from derelict land, highway maintenance and runoff, nonpoint source**
	Temperature	**Low**	**Hydromodification, upstream impoundment, removal of riparian vegetation, streambank modification/destabilization, nonpoint source**
Lake Sonoma	**Mercury**	**Low**	**Resource extraction, nonpoint source**
Petaluma River	Nutrients	Medium	Agriculture; land development; urban runoff
	Diazinon	**Low**	**Urban runoff/storm sewers**
	Pathogens	Medium	Agriculture; land development; urban runoff
	Sedimentation / Siltation	Medium	Agriculture; land development; urban runoff
Petaluma River (tidal portion)	**Nickel**	**Low**	**Municipal point sources, urban runoff/storm sewers, atmospheric deposition**
	Nutrients	**Medium**	**Agriculture, construction/land development, urban runoff/storm sewers**
	Diazinon	**Low**	**Urban runoff/storm sewers**

Waterway	*Pollutant / Stressor*	*Priority*	*Source*
Russian River-Lower (Austin Creek)	**Sedimentation/ Siltation**	**Medium**	**Silverculture, construction/land development, disturbed sites, dam construction, flow regulation/modification, erosion/siltation**
	Temperature	**Low**	**Hydromodifcation, flow regulation/modification, habitat modification, removal of riparian vegetation, nonpoint source**
Russian River-Lower (Guerneville)	**Pathogens**	**Low**	**Nonpoint/point source**
	Sedimentation/ Siltation	Medium	Agriculture, irrigated crop production, agriculture-storm runoff, silviculture, construction/land development, highway/road/bridge construction, land development, hydromodification, channelization, dam construction, upstream impoundment, flow regulation/modification, habitat modification, removal of riparian vegetation, streambank modification/destabilization, drainage/filling of wetlands, channel erosion, erosion/siltation
	Temperature	**Low**	**Hydromodification, upstream impoundment, flow regulation/modification, habitat modification, removal of riparian vegetation, streambank modification, destabilization, nonpoint source**
Russian River-Middle (Big Sulphur Creek)	**Sedimentation/ Siltation**	**Medium**	**Geothermal development, erosion/siltation, nonpoint source**
	Temperature	**Low**	**Flow regulation/modification, habitat modification, removal of riparian vegetation, nonpoint source**
Russian River-Middle (Dry Creek)	**Sedimentation/ Siltation**	**Medium**	**Agriculture, silviculture, logging road construction/maintenance, construction/land development/highway/road/bridge construction, disturbed sites, hydromodification, channelization, dam construction, upstream impoundment, flow regulation/modification, habitat modification, removal of riparian vegetation, streambank modification/destabilization, drainage/filling of wetlands, channel erosion, nonpoint source**
	Temperature	**Low**	**Hydromodification, upstream impoundment, flow regulation/modification, habitat modification, removal of riparian vegetation, streambank modification/destabilization, nonpoint source**

Waterway	*Pollutant / Stressor*	*Priority*	*Source*
Russian River-Middle (Geyserville)	**Sedimentation/ Siltation**	**Medium**	**Agriculture, nonirrigated crop production, irrigated crop production, specialty crop production, range grazing-riparian, agriculture-storm runoff, agriculture-grazing, silviculture, construction/land development, geothermal development, disturbed sites, surface runoff, resource extraction, channelization, bridge construction, removal of riparian vegetation, streambank modification/destabilization, drainage/filling of wetlands, channel erosion, erosion/siltation natural sources, nonpoint source**
	Temperature	**Low**	**Flow regulation/modification, habitat modification, removal of riparian vegetation, nonpoint source**
Russian River-Middle (Mark West Creek)	**Sedimentation/ Siltation**	**Medium**	**Agriculture, nonirrigated crop production, irrigated crop production, specialty crop production, range grazing-riparian, agriculture-storm runoff, agriculture-grazing, silviculture, construction/land development, geothermal development, disturbed sites, surface runoff, resource extraction, channelization, bridge construction, removal of riparian vegetation, streambank modification/destabilization, drainage/filling of wetlands, channel erosion, erosion/siltation**
	Temperature	**Low**	**Hydromodification, upstream impoundment, flow regulation/modification, habitat modification, removal of riparian vegetation, streambank modification/destabilization, nonpoint source**
Russian River-Middle (Mark West Creek)	**Sedimentation/ Siltation**	**Medium**	**Agriculture, nonirrigated crop production, irrigated crop production, specialty crop production, range grazing-riparian, agriculture-storm runoff, agriculture-grazing, silviculture, construction/land development, geothermal development, disturbed sites, surface runoff, resource extraction, channelization, bridge construction, removal of riparian vegetation, streambank modification/destabilization, drainage/filling of wetlands, channel erosion, erosion/siltation**
	Temperature	**Low**	**Hydromodification, upstream impoundment, flow regulation/modification, habitat modification, removal of riparian vegetation, streambank modification/destabilization, nonpoint source**
San Antonio Creek	**Diazinon**	**High**	**Urban runoff/storm sewers**

Waterway	*Pollutant / Stressor*	*Priority*	*Source*
San Pablo Bay [c]	Chlordane	Low	Non-point sources
	~~Copper~~	~~Medium~~	~~Municipal point sources, urban runoff, atmospheric deposition~~
	DDT	Low	Non-point sources
	Diazinon	~~Medium~~ **Low**	Non-point sources
	Dieldrin	Low	Non-point sources
	Dioxin compounds	~~High~~ **Low**	Atmospheric deposition [d]
	Exotic Species [f]	~~High~~ **Medium**	Ballast water
	Furan compounds	~~High~~ **Low**	Atmospheric deposition [e]
	Mercury	High	Municipal point sources, resource extraction, atmospheric deposition, natural sources, nonpoint source
	Nickel	Low	~~Municipal point sources; urban runoff~~ **source unknown**
	PCBs [g]	~~Medium~~ **High**	Unknown non-point sources
	PCBs (dioxin-like)	~~High~~ **Low**	Unknown non-point sources
	Selenium	Low	Industrial point sources; agriculture; natural sources; exotic species
Santa Rosa Creek	**Sedimentation/ Siltation**	**Medium**	**Agriculture, nonirrigated crop production, irrigated crop production, specialty crop production, pasture grazing, range grazing, construction/land development, highway/road/bridge construction, land development, urban runoff/storm sewers, urban runoff-non-industrial permitted, surface runoff, hydromodification, channelization, bridge construction, habitat modification, removal of riparian vegetation, streambank modification/destabilization, drainage/filling of wetlands, channel erosion, erosion/siltation, natural sources, nonpoint source**
	Temperature	**Low**	**Hydromodification, upstream impoundment, removal of riparian vegetation, streambank modification/destabilization, nonpoint source**
	Pathogens	**Low**	**Nonpoint source, point source**
Sonoma Creek	Nutrients	Medium	Agriculture, **construction/land development**, land development, urban runoff/**storm sewers**

Waterway	*Pollutant / Stressor*	*Priority*	*Source*
	Pathogens	~~Medium~~ **Low**	Agriculture, **construction/land development**, land development, urban runoff/**storm sewers**
	Sedimentation / Siltation	Medium	Agriculture, **construction/land development**, land development, urban runoff/**storm sewers**
Stemple Creek	Nutrients	~~Low~~ **Medium**	~~Pasture land, manure lagoons, non point sources.~~ **Agriculture, irrigated crop production, grazing-riparian, intensive animal feeding operations, agriculture-storm runoff, land development, hydromodification, channelization, removal of riparian vegetation, streambank modification/destabilization, drainage/filling of wetlands, channel erosion, natural sources**
	Sediment	**Low**	**Agriculture, grazing-related sources, land development, erosion/siltation, nonpoint source**

a Hydromodification is any alteration of a stream channel.

b Non-point source pollution is discussed in *Impact 4.5-1 Water Quality – Residential, Commercial, Industrial, and Public Uses.*

c Silviculture is a branch of forestry dealing with the development of forests.

d The Petaluma River and Sonoma Creek discharge to San Pablo Bay.

e Anthropogenic and/or natural sources release these compounds into the atmosphere. These compounds are later deposited on land and water.

f Exotic species disrupt natural benthos, change pollutant availability in food chain, and disrupt food availability to native species.

g Polychlorinated biphenyl fluids (PCBs) are used for heat transfer and electrical insulation properties and are common industrial contaminants. These materials, under certain fire or explosion situations can also produce the more toxic compounds of the dioxin family - the polychlorodioxins and polychlorofurans.

Sources: *California 303 (d) List and TMDL Priority Schedule,* **State Water Resources Control Board, 2003**.

2.2 RESPONSES TO COMMENTS

GP 2020 DEIR Response to Comments- Full List

Response to Comment #1-01:
The comment is correct. The eastern gateways in the travel model represent Napa and Solano Counties, and there are five of them: Highway 128 East, Calistoga/Petrified Forest Road, Trinity Road, Highway 121 East, and Highway 37 East. The traditional use of the term East Bay Counties refers to Alameda and Contra Costa Counties.

Based on the above, the third sentence in the first full paragraph on page #4.2-5 is modified to read:

> "Modeling encompassed 372 traffic analysis zones within Sonoma County and 18 external zones, including seven in Marin, two in San Francisco and the Peninsula, six in ~~the East Bay~~ **Napa and Solano Counties**, and three in areas north of Sonoma County, for a total of 400 zones".

Response to Comment #1-02:
The comment is correct that the SCTA Countywide Bicycle Committee is now officially the Countywide Bicycle and Pedestrian Advisory Committee. Accordingly, the text on page #4.2-24 of the DEIR is revised as follows:

> "A ~~countywide Bicycle Committee Advisory Committee (CBAC)~~ **Countywide Bicycle and Pedestrian Advisory Committee** (CBPAC) advises the SCTA on issues related to bicycle planning in the county."

Response to Comment #1-03:
The SCTM model can be used (and has been) as a tool to assess calming measures that change network connectivity. A road closure or a "no left turn" restriction can be modeled effectively with the travel model. Several "sweeper" alternatives (involving re-aligning Petaluma Hill Road into Railroad Avenue) have been evaluated. However, the model is not a good tool to analyze small-scale operational changes. Such measures include new stop signs or roundabouts, speed humps, reduced street widths, or other similar measures.

Response to Comment #1-04:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Draft GP 2020 Circulation and Transit Element Policies CT-1m, CT-1n, CT-1o, CT-5b, CT-5c, CT-5d, and CT-5f provide policy support for establishing regional transportation mitigation fees.

Response to Comment #2-01:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the DEIR. The comment has been provided to the decision making bodies for consideration.

Response to Comment #2-02:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the DEIR. The comment has been provided to the decision making bodies for consideration.

Response to Comment #2-03:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the DEIR. The comment has been provided to the decision making bodies for consideration.

Response to Comment #2-04:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the DEIR. The comment has been provided to the decision making bodies for consideration.

Response to Comment #2-05:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the DEIR. The comment has been provided to the decision making bodies for consideration.

Response to Comment #2-06:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the DEIR. The comment has been provided to the decision making bodies for consideration.

Response to Comment #2-07:
The comment is correct in citing the need for a traffic analysis to establish the portion of the cost of improvements attributable to each jurisdiction. However, the nexus for the improvements and the need for the fee have been established by the traffic analysis performed for the Draft General Plan Circulation and Transit Element and the DEIR. Section 4.2 (Transportation) of the DEIR analyzed the transportation and traffic impacts of Draft GP 2020 and the Cities based upon the development allowed by the general plans of each of the nine cities and the County. Therefore, the impacts described in the DEIR identify and address the cumulative impacts of the combination of existing development and future growth of all of these jurisdictions. It also factors in the traffic that crosses county borders. As a result, the DEIR shows that the impacts, and the improvements necessary to mitigate the impacts to an acceptable level, are the shared responsibility of both existing and future development of all of the jurisdictions. The Draft GP 2020 Circulation and Transit Element Policies CT-1n, CT-1o, CT-1p, and CT-5c call for the appropriate traffic analyses and/or nexus studies requested by the comment in order to support the fair share funding of improvements.

Response to Comment #2-08:
See response to comment #2-7. The comment regarding the use of the LAFCo process does not pertain to the adequacy of the DEIR.

Response to Comment #2-09:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the DEIR. The comment has been provided to the decision making bodies for consideration

Response to Comment #2-10:
Comment noted. See response to comment #2-7.

Response to Comment #2-11:
Comment noted. See response to comment #2.7.

Response to Comment #2-12:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the DEIR. The comment has been provided to the decision making bodies for consideration.

Response to Comment #3-01:
The comment is correct. Footnote A on Exhibit 4.9-2 is removed, making it clear that the North Marin Water District is a contractor for water from the Sonoma County Water Agency system.

Response to Comment #4-01:
Comment noted. The projected population and housing growth in the unincorporated area under Draft GP 2020 is only about a quarter of the projected countywide growth reflected in these figures. The impacts of Draft GP 2020 land uses and development in the unincorporated area are addressed in Section 4.6 (Biological Resources) of the DEIR.

Response to Comment #4-02:
As noted in the comment, the marbled murrelet is a State-listed endangered and federally-listed threatened seabird which nests in coastal forests, typically nesting on the limbs of old-growth and residual coast redwood and Douglas-fir trees. According to the comment, marbled murrelets have been documented exhibiting nesting behavior in the South Fork Gualala River watershed, and murrelets have been observed in the surf zone along the Sonoma coast from the mouth of the Gualala River to Salmon Creek.

A discussion of special status species known or suspected to occur in Sonoma County is provided in Section 4.6 (Biological Resources) of the DEIR, as well as in the Sonoma County General Plan Update, Biological and Wetland Resources Background Report. Marbled murrelet is not included in Exhibit #4.6-4 of the DEIR or Table 1 of the Background Report, and no occurrences of this species were reported by the California Natural Diversity Data Base when these two documents were prepared. However, marbled murrelet is included in the list of special-status species prepared by the U.S. Fish and Wildlife Service contained in Appendix A of the Background Report. In response to the comment, Exhibit #4.6-4 on page #4.6-12 of the DEIR is revised has been revised as follows:

Exhibit 4.6-4
Special-Status Plant and Animal Species Known to Occur in Sonoma County

Common Name (Scientific Name)	*Federal Status [a]*	*State Status [b]*	*Habitat Characteristics*	*Number of CNDDB Records*
ANIMALS				
Invertebrates				
Behren's silverspot butterfly *(Speyeria zerene behrensii*)	FE	None	Coastal terrace prairie with suitable violet host plant.	2
Bumblebee scarab beetle *(Lichnanthe ursina*)	FSC	None	Sand dunes and in sand dunes, observed from April to August.	2
California freshwater shrimp *(Syncaris pacifica*)	FE	SE	Riparian scrub and woodland in perennial drainages with undercut banks and overhanging vegetation.	10
California linderiella *(Linderiella occidentalis*)	None	None	Vernal pools and swales in grassland and oak savanna.	5
Callippe silverspot butterfly *(Speyeria callippe calliope*)	FE	None	Grassland and scrub with suitable violet host plant.	1
Mimic tryonia (*Tryonia imitator*)	None	None	Brackish water marsh.	1
Monarch butterfly *(Danaus plexippus*)	None	None	Coniferous forest, planted cypress/eucalyptus, generally along coast. Overwintering sites of concern.	18
Myrtles silverspot *(Speyeria zerene myrtleae*)	FE	None	Grasslands, pasture, sand dunes along coast with suitable violet host plant species.	9
Opler's longhorn moth *(Adela oplerella*)	FSC	None	Serpentine grassland.	1
Ricksecker's water scavenger beetle *(Hydrochara rickseckeri*)	FSC	None	Freshwater ponds, stockponds, and larger pools.	1
Sonoma arctic skipper *(Carterocephalus palaemon magnus*)	FSC	CSC	Redwood and evergreen forest.	1
Tomales isopod *(Caecidotea tomalensis*)	FSC	None	Freshwater pond and seasonal wetlands.	2
Fish				
Coho salmon - Central California ESU *(Oncorhynchus kisutch*)	FT	SE	Anadromous species migrates to rivers and streams with suitable substrate and temperatures for egg laying.	1
Navarro roach *(Lavinia symmetricus navarroensis*)	None	CSC	Freshwater streams.	2
Gualala roach *(Lavinia symmetricus parvipinnis*)	FSC	CSC	Freshwater streams.	3
Russian river tule perch *(Hysterocarpus traski pomo*)	FSC	CSC	Streams with overhanging riparian vegetation.	4
Sacramento splittail *(Pogonichthys macrolepidotus*)	FT	CSC	Brackish water habitat found along Petaluma River.	1
Steelhead-Central California Coast ESU *(Oncorhynchus mykiss irideus*)	FT	None	Anadromous species migrates to rivers and streams with suitable substrate and temperatures for egg laying.	2
Tidewater goby *(Eucyclogobius newberryi*)	FE	CSC	Salt and brackish water lagoons and rivers.	3

Common Name (Scientific Name)	Federal Status [a]	State Status [b]	Habitat Characteristics	Number of CNDDB Records
Amphibians/Reptiles				
California red-legged frog *(Rana aurora draytonii*)	FT	None	Typically found in riparian and freshwater marsh, but known to disperse considerable distances through grassland and other habitats.	9
California tiger salamander *(Ambystoma californiense*)	FT	CSC, P	Breeds in vernal pools, swales, drainages, and ponds, and aestivates in burrows and other moist retreats in grassland, savanna, and fields.	24
Foothill yellow-legged frog *(Rana boylii*)	FSC	CSC, P	Riparian dependent species typically in second order streams, with mature trees and bed of gravel, cobble, and boulders.	26
Western pond turtle *(Clemmys marmorata*)	FSC	CSC, P	Freshwater streams, pools, and ponds with secure haulout along banks and adjacent uplands for egg laying.	26
Birds				
American white pelican (*Pelecanus erythrorhynchos*)	None	CSC	Open water habitats.	0
Bald eagle (*Haliaeetus leucocephalus*)	FT	SE, P	Open water habitats.	0
Bank swallow *(Riparia riparia*)	None	ST	Nests in stream banks and cliffs with friable soils.	1
Black swift *(Cypseloides niger*)	None	CSC	Rare, local summer resident of mountain canyons. Nests on cliffs behind or adjacent to waterfalls.	1
Burrowing owl *(Athene cunicularia*)	None	CSC	Agricultural fields and grasslands, nesting in burrows, pipes and debris.	2
California black rail *(Laterallus jamaicensis coturniculus*)	None	ST, P	Salt and brackish water marsh.	4
California clapper rail *(Rallus longirostris obsoletus*)	FE	SE, P	Salt and brackish water marsh.	9
Double-crested cormorant *(Phalacrocorax auritus*)	None	CSC	Forages in open water habitats, colonial roosting/sunning in secure locations. Roosting locations of concern to CDFG.	1
Great blue heron *(Ardea herodius*)	None	None	Forages in fresh, brackish, salt marsh habitats, nests in trees. Roosting locations of concern to CDFG.	1
Loggerhead shrike (*Laniaus ludovicianus*)	None	CSC	Open grasslands, fields, and broken woodlands.	0
Marbled murrelet (*Brachyramphus marmoratus*)	FT	SE	Seabird nesting in old-growth redwood and Douglas-fir forest	0
Northern harrier (*Circus cyaneus*)	None	CSC	Forages and nests in open freshwater marshes, wet meadows, moist grasslands, and hay fields.	0
Olive-sided flycatcher (*Contopus cooperi*)	None	CSC	Nests in open conifer and mixed conifer forests.	0
Saltmarsh common yellowthroat *(Geothlypis trichas sinuosa*)	FSC	None	Brackish and salt marsh dominated by bulrush.	16
Tricolored blackbird *(Agelaius tricolor*)	FSC	CSC	Colonial nester in thickets along riparian corridors.	3
Vaux's swift (*Chaetura vauxi*)	None	CSC	Nests in hollowed snags in old growth and fire swept stands.	0
Western yellow-billed cuckoo *(Coccyzus americanus occidentalis*)	None	SE	Historical occurrences along riparian woodland and scrub.	2
Western snowy plover *(Charadrius alexandrinus nivosus*)	FT	CSC	Nests along exposed beaches, forages along ocean shoreline.	2
White-tailed kite *(Elanus leucurus*)	None	P	Nests in trees and shrubs, forages in grassland, savanna, open habitats.	1
Yellow-breasted chat (*Icteria virens*)	None	CSC	Nests in dense riparian areas with abundant blackberry patches	0
Yellow warbler (*Dendroica petechia*)	None	CSC	Breeds in well-developed riparian habitat.	0

Common Name (Scientific Name)	Federal Status [a]	State Status [b]	Habitat Characteristics	Number of CNDDB Records
Purple martin *(Progne subis*)	None	CSC	Nests in snags in a variety of forest and woodland types.	1
Northern spotted owl *(Strix occidentalis caurina*)	FT	None	Evergreen forest and woodland with suitable prey, typically wood rat.	48
Mammals				
Pallid bat *(Antrozous pallidus*)	None	CSC	Varied foraging habitat with abandoned structures, mines, caves used for roosting where disturbance is minimal.	12
Red tree vole *(Arborimus pomo*)	None	None	Mixed evergreen woodland and forest.	27
Salt-marsh harvest mouse *(Reithrodontomys raviventris*)	FE	SE	Salt marsh and brackish marsh dominated by pickleweed.	3
Suisun shrew *(Sorex ornatus sinuous*)	None	None	Salt marsh and brackish marsh.	1
Yuma myotis *(Myotis yumanensis*)	None	None	Varied foraging habitat with abandoned structures, mines, caves used for roosting where disturbance is minimal.	1

Common Name (Scientific Name)	Federal Status [a]	State Status [b]	CNPS Status [c]	Habitat Characteristics	Number of CNDDB Records
PLANTS					
Pink sand-verbena *(Abronia umbellata ssp breviflora)*	None	None	1B	Coastal dunes.	3
Blasdale's bent grass *(Agrostis blasdalei)*	None	None	1B	Exposed coastal dunes, bluffs, and prairie.	4
Pt Reyes bent grass *(Agrostis clivicola var punta-reyesensis)*	None	None	None	Grassland in sandy loam along coast. Considered but rejected for listing by CNPS.	2
Franciscan onion *(Allium peninsulare var franciscanum)*	None	None	1B	Woodland, grassland, often on serpentine substrate.	3
Sonoma alopecurus *(Alopecurus aequalis var sonomensis)*	FE	None	1B	Freshwater marsh, mesic grasslands, seasonal pools, riparian scrub.	12
Napa false indigo *(Amorpha californica var napensis)*	None	None	1B	Mixed evergreen forest, open woodland, chaparral often in volcanic substrate.	20
Baker's manzanita *(Arctostaphylos bakeri ssp bakeri)*	None	SR	1B	Forest, chaparral, often on serpentine substrate.	8
The Cedars manzanita *(Arctostaphylos bakeri ssp sublaevis)*	None	SR	1B	Serpentine chaparral/*Cupressus sargentii* woodland.	4
Sonoma manzanita *(Arctostaphylos canescens ssp sonommensis)*	None	None	1B	Chaparral, coniferous forest, sometimes on serpentine or silty loam.	2
Vine Hill manzanita *(Arctostaphylos densiflora)*	None	SE	1B	Dwarf chaparral 'barren' on sandy acidic soil, known from the Sonoma Barren near Forestville.	4
Konocti manzanita *(Arctostaphylos manzanita ssp elegans)*	None	None	1B	Volcanic substrate in chaparral, woodland, and forest openings often on serpentine substrate.	3
Rincon manzanita *(Arctostaphylos stanfordiana ssp raichei)*	None	None	1B	Chaparral, forest openings on rocky substrate.	11
Clara Hunt's milk-vetch *(Astragalus clarianus)*	FE	ST	1B	Grassy areas on rocky, wooded slope in volcanic substrate.	1
Alkali milk-vetch *(Astragalus tener var tener)*	None	None	1B	Grassland, alkaline vernal pools.	1
Big-scale balsamroot *(Balsamorhiza macrolepis var macrolepis)*	None	None	1B	Chaparral, woodland, and grassland, sometimes on serpentine substrate.	2
Sonoma sunshine *(Blennosperma bakeri)*	FE	SE	1B	Vernal pools, swales, ditches, and mesic grasslands. Known only from Santa Rosa Plain and Sonoma area.	26
Thurber's reed grass *(Calamagrostis crassiglumis)*	None	None	2	Coastal scrub and freshwater marsh.	1
The Cedars fairy-lantern *(Calochortus raichei)*	None	None	1B	Serpentine barrens in chaparral/forest. Known only from The Cedars.	8
Swamp harebell *(Campanula californica)*	None	None	1B	Mesic openings and pools in mixed evergreen forest, coastal prairie.	19
White sedge *(Carex albida)*	FE	SE	1B	Wet meadow, bogs, freshwater marsh. Known only from Pitkin Marsh and extirpated occurrences.	3
Bristly sedge *(Carex comosa)*	None	None	2	Seeps, marsh, bogs, in forest and coastal prairie.	2

Common Name (Scientific Name)	Federal Status [a]	State Status [b]	CNPS Status [c]	Habitat Characteristics	Number of CNDDB Records
Deceiving sedge *(Carex saliniformis*)	None	None	1B	Coastal prairie, coastal scrub, meadows and seeps.	3
Mendocino Coast Indian paintbrush *(Castilleja mendocinensis*)	None	None	1B	Coastal bluff scrub, scrub, dunes and prairie, coniferous forest.	1
Pitkin Marsh Indian paintbrush *(Castilleja uliginosa*)	None	SE	1A	Freshwater marsh and mesic grassland. Known from two occurrences from Pitkin Marsh and Trembley's Marsh.	2
Calistoga ceanothus *(Ceanothus divergens*)	None	None	1B	Chaparral and mixed woodland on serpentine and volcanic substrate.	12
Rincon Ridge ceanothus *(Ceanothus confuses*)	None	None	1B	Chaparral, forest, and woodlands on serpentine and volcanic substrate.	13
Sonoma ceanothus *(Ceanothus sonomensis*)	None	None	1B	Chaparral in sandy, serpentine, and volcanic substrate.	17
Dwarf soaproot *(Chlorogalum pomeridianum var minus*)	None	None	1B	Chaparral on serpentine.	1
San Francisco Bay spineflower *(Chorizanthe cuspidata var cuspidata*)	None	None	1B	Coastal bluff scrub, dunes, scrub, and prairie.	1
Woolly-headed spineflower *(Chorizanthe cuspidata var villosa*)	None	None	1B	Coastal dunes, prairie, scrub.	1
Sonoma spineflower *(Chorizanthe valida*)	FE	SE	1B	Coastal prairie.	3
Vine Hill clarkia *(Clarkia imbricata*)	FE	SE	1B	Grassland with sandy soil.	3
Point Reyes bird's-beak *(Cordylanthus maritimus ssp palustris*)	None	None	1B	Coastal salt marsh.	4
Soft bird's-beak *(Cordylanthus mollis ssp mollis*)	FE	SR	1B	Coastal salt marsh.	2
Pennell's bird's-beak *(Cordylanthus tenuis ssp capillaries*)	FE	SR	1B	Serpentine barren in open chaparral and forest.	3
Pygmy cypress *(Cupressus goveniana ssp pigmaea*)	None	None	1B	Coniferous forest. Southernmost stand of pygmy cypress	1
Baker's larkspur *(Delphinium bakeri*)	FE	SR	1B	Coastal shrub. Known from only one occurrence along Salmon Creek.	1
Yellow larkspur *(Delphinium luteum*)	FE	SR	1B	Coastal prairie, scrub, and openings in woodland and chaparral.	5
Geysers dichanthelium *(Dichanthelium lanuginosum var thermal*e)	None	SE	1B	Coniferous forest, riparian scrub, mesic grassland along edge of streams in geothermal substrate.	8
Western leatherwood *(Dirca occidentalis*)	None	None	1B	Mixed evergreen forest, woodland, chaparral, and riparian.	2
Dwarf downingia *(Downingia pusilla*)	None	None	2	Vernal pools and swales, mesic grassland..	14
Narrow-leaved daisy *(Erigeron angustatus*)	None	None	1B	Serpentine grassland and open chaparral.	4
Serpentine daisy *(Erigeron serpentinus*)	None	None	1B	Chaparral and serpentine seeps in cypress forest. Known only from The Cedars and along Porter Creek.	1
Supple daisy *(Erigeron supplex*)	None	None	1B	Coastal bluff scrub and prairie.	4
Snow Mountain buckwheat *(Eriogonum nervulosum*)	None	None	1B	Serpentine barrens and rocky slopes in chaparral.	5
Round-leaved filaree *(Erodium macrophyllum*)	None	None	2	Woodland and grassland.	1

Common Name (Scientific Name)	Federal Status [a]	State Status [b]	CNPS Status [c]	Habitat Characteristics	Number of CNDDB Records
Loch lomond button-celery *(Eryngium constancei)*	FE	SE	1B	Vernal pools. Known from only three occurrences.	1
Fragrant fritillary *(Fritillaria liliacea)*	None	None	1B	Grassland, coastal prairie and scrub, openings in woodland, sometimes in serpentine or volcanic substrate.	5
Roderick's fritillary *(Fritillaria roderickii)*	None	SE	1B	Coastal bluff scrub and prairie, grasslands.	1
Two-carpellate western flax *(Hesperolinon bicarpellatum)*	None	None	1B	Chaparral in serpentine substrate.	1
Thin-lobed horkelia *(Horkelia tenuiloba)*	None	None	1B	Chaparral and openings in coniferous forest.	4
Burke's goldfields *(Lasthenia burkei)*	FE	SE	1B	Vernal pools, swales, ditches, and surrounding grassland.	25
Delta tule pea *(Lathyrus jepsonii var jepsonii)*	None	None	1B	Fresh and brackish water marsh.	1
Colusa layia *(Layia septentrionalis)*	None	None	1B	Chaparral, woodland, grassland on sandy and serpentine substrate.	3
Legenere *(Legenere limosa)*	None	None	1B	Vernal pools.	2
Crystal Springs lessingia *(Lessingia arachnoidea)*	None	None	1B	Woodland, coastal scrub, grassland in serpentine substrate.	]2
Coast lily *(Lilium maritimum)*	None	None	1B	Meadows, coastal prairie in open scrub and forest.	6
Pitkin marsh lily *(Lilium pardalinum ssp pitkinense)*	FE	SE	1B	Meadow and mesic grassland with shrubs. Known from occurrences near Sebastopol.	3
Sebastopol meadowfoam *(Limnanthes vinculans)*	FE	SE	1B	Vernal pools, swales, and ditches, and mesic grasslands.	40
Jepson's linanthus *(Linanthus jepsonii)*	None	None	1B	Chaparral, woodland usually in volcanic substrate.	6
Rose linanthus *(Linanthus rosaceus)*	None	None	1B	Coastal bluff scrub.	1
Cobb Mountain lupine *(Lupinus sericatus)*	None	None	1B	Open chaparral and forest.	11
Tidestrom's lupine *(Lupinus tidestromii)*	FE	SE	1B	Coastal dunes with fine sand. Known from fewer than 20 occurrences.	1
Robust monardella *(Monardella villosa ssp globosa)*	None	None	1B	Openings in chaparral, woodland, and coastal scrub. Known from approximately 10 occurrences..	3
Baker's navarretia *(Navarretia leucocephala ssp bakeri)*	None	None	1B	Vernal pools and swales, woodlands, forest, and grassland.	11
Many-flowered navarretia *(Navarretia leucocephala ssp plieantha)*	FE	SE	1B	Vernal pools and swales.	4
Sonoma beardtongue *(Penstemon newberryi var sonomensis)*	None	None	1B	Chaparral in rock outcrops and talus slopes.	2
North Coast semaphore grass *(Pleuropogon hooverianus)*	None	Candidate	1B	Forest, meadows, seeps, vernal pools, and mesic grasslands.	2
Petaluma popcorn-flower *(Plagiobothrys mollis var vestitus)*	None	None	1A	Coastal saltmarsh and mesic grassland. Known from type locality in Petaluma from 1880.	1
Marin knotweed *(Polygonum marinense)*	None	None	3	Salt and brackish marsh. Known from fewer than 15 occurrences.	2
Hickman's cinquefoil *(Potentilla hickmanii)*	FE	SE	1B	Coastal bluff scrub, forest, seeps, meadows, and marshes.	1
California beaked-rush *(Rhynchospora californica)*	None	None	1B	Bogs, seeps, meadows in coniferous forest. Known from fewer than 10 occurrences.	3

Common Name (Scientific Name)	Federal Status [a]	State Status [b]	CNPS Status [c]	Habitat Characteristics	Number of CNDDB Records
Round-headed beaked-rush *(Rhynchospora globularis var globularis*)	None	None	2	Freshwater marsh.	2
Point Reyes checkerbloom *(Sidalcea calycosa ssp rhizomata*)	None	None	1B	Freshwater marsh.	5
Marin checkerbloom *(Sidalcea hickmanii ssp viridis*)	None	None	1B	Chaparral in serpentine substrate.	2
Maple-leaved checkerbloom *(Sidalcea malachroides*)	None	None	1B	Coastal scrub, coastal bluff, open coniferous forest.	7
Marsh checkerbloom *(Sidalcea oregana ssp hydrophila*)	None	None	1B	Meadows, riparian scrub.	1
Kenwood Marsh checkerbloom *(Sidalcea oregana ssp valida*)	FE	SE	1B	Freshwater marsh and mesic grassland. Known from only three occurrences, including two in Kenwood Marsh.	2
Freed's jewel-flower *(Streptanthus brachiatus ssp hoffmanni*)	None	None	1B	Chaparral, woodland in serpentine substrate. Known from approximately 10 occurrences.	4
Socrates Mine jewel-flower *(Streptanthus brachiatus ssp brachiates*)	None	None	1B	Forest and chaparral in serpentine substrate.	7
Secund jewel-flower *(Streptanthus glandulosus var hoffmanni*)	None	None	1B	Chaparral, woodland, grassland often on serpentine substrate.	2
Dorr's Cabin jewel-flower *(Streptanthus morrisonii*)	None	None	1B	Chaparral, coniferous forest, on serpentine substrate. Known from only two small occurrences in The Cedars.	6
Beaked tracyina *(Tracyina rostrata*)	None	None	1B	Woodland and grassland. Known from fewer than 15 occurrences.	1
Showy Indian clover *(Trifolium amoenus*)	FE	None	1B	Coastal bluff scrub and grasslands. Presumed extinct until rediscovered in 1993 and in 1996.	11
Santa Cruz clover *(Trifolium buckwestiorum*)	None	None	1B	Forest, woodland, coastal prairie. Known from about 10 small occurrences.	1
Long-beard lichen *(Usnea longissima*)	None	None	-	Coniferous forest. Non-vascular species of concern.	7

[a] Federal Status Designation:
FE = Listed as "endangered" under the federal Endangered Species Act.
FT = Listed as "threatened" under the federal Endangered Species Act.
PE = Proposed for federal listing as "endangered".
C = A candidate species under review for federal listing.
FSC= Federal Species of Concern; formerly considered a candidate species for listing by the USFWS.

[b] State Status Designation:
SE = Listed as "endangered" under the California Endangered Species Act.
SR = Listed as "rare" under the California Endangered Species Act.
ST = Listed as "threatened" under the California Endangered Species Act.
P = California protected and fully protected species; individual may not be possessed or taken.
CSC=Considered a California Special Concern species by the CDFG.

[c] CNPS Status Designation:
1A = Plants presumed extinct in California.
1B = Plants rare and endangered in California and elsewhere.
2 = Plants rare and endangered in California, more common elsewhere.
3 = Need more information; a watch list.

Response to Comment #4-03:
With respect to the DEIR's discussion of marbled murelet in Sonoma County, see response to comment #4-02. Mitigation Measure #4.6-2(a) on page #4.6-35 of the DEIR includes a new Policy OSRC-7u which calls for identification of old-growth forests, and encourages their preservation and public acquisition. In addition, Policy OSRC-7i calls for a comprehensive habitat mapping program which is responsive to the need to identify these habitats.

The discussion in the second paragraph on page #4.6-34 of the DEIR is revised as follows to acknowledge the possible presence of nesting marbled murrelet in old-growth forests in the South Fork Gualala River watershed:

> "These stands may be subject to increasing pressure for timber harvest because of their high economic value, but any proposed harvest plans are subject only to State Forest Practice Act regulations **and are not under the jurisdiction of the County of Sonoma."**

Response to Comment #4-04:
The DEIR is not intended to provide a detailed analysis for the more than 40 special status animal species known or suspected to occur in Sonoma County. Instead, it provides an assessment of the biological resource impacts of all land uses and development under Draft GP 2020 policies and programs. Section 4.6 (Biological Resources) of the DEIR identifies these impacts on special status species under Impact #4.6-1, which acknowledges the impact of encroaching development on the habitat for these species, describes the policies in Draft GP 2020 that address those impacts, and proposes new policies, such as Mitigation Measure #4.6-2(a), to further mitigate impacts to special status species. Mitigation measure #4.6-2(a) has been added as Policy OSRC-7u. See also response to comment #4-02 and #4-03 and Master Response C (Program EIR/Level of Detail).

Response to Comment #4-05:
The DEIR is not intended to provide a detailed analysis for the more than 40 special-status animal species known or suspected to occur in Sonoma County, but instead provides an assessment of the biological resource impacts of all land uses and development under Draft GP 2020 policies and programs. Section 4.6 (Biological Resources) of the DEIR identifies these impacts on special status species under Impact #4.6-1, which acknowledges the impact of encroaching development on the habitat for these species, describes the policies in Draft GP 2020 that address those impacts, and proposes new policies, such as Mitigation Measure #4.6-2(a), to further mitigate impacts to special status species. Northern spotted owl is listed as a special status species in Exhibit #4.6-4. See also response to comment #4-02 and #4-03 and Master Response C (Program EIR/Level of Detail).

Response to Comment #4-06:
Reductions in the setback along streams designated in the Draft GP 2020 Open Space and Resource Conservation Element would be determined by the applicable decision making body for the permit. Exceptions along designated streams would be subject to meeting the criteria of Policy OSRC-8e.

Response to Comment #4-07:
All intermittent streams that have been mapped on the U.S.G.S. topographical maps are proposed for designation and protection in the Draft GP 2020 Open Space and Resource Conservation Element. In addition to these designations, Policy OSRC-8i requires that proposed discretionary permit applications on lands near streams be referred to CDFG and other responsible resource agencies for review and comment and any appropriate mitigation for impacts.

Response to Comment #4-08:
The comment is incorrect with respect to the conclusions of the DEIR regarding local government authority to regulate timber operations. Section 4.8 (Agricultural and Timber Resources) of the DEIR states that the Forest Practice Rules pre-empt local governments from regulating timber operations **within** designated Timber Production Zones (TPZ) and that the Rules may allow local governments some latitude in regulating timber operations **outside** of TPZs, including regulation of the location of timber

operations to avoid land use incompatibilities. Virtually all of the Counties with local rules were granted such rules when the Forest Practice Act was first enacted, during a time window established by the State Board of Forestry. Nonetheless, Sonoma County does have the option to petition the Board of Forestry for additional timber rules within or outside of TPZs to take account of local conditions. In fact, Sonoma County has previously requested approval of such rules. However, the petition was denied by the State Board. In the process of considering and ultimately denying the petition, the State Board cited the fact that the existing Forest Practice Rules addressed many of the issues for which the County requested local rules. As such, the suggested mitigation measure is not within the jurisdiction of the County and is, therefore, not feasible. See also response to comment #271-16 and Master Response B (Jurisdiction).

Response to Comment #4-09:
Proposed Policy OSRC-12e is not intended to mitigate for the loss of wildlife habitat but rather for the loss of commercial timberland to non-timber uses. Impacts to wildlife habitat from the conversion of forestland are addressed in Section 4.6 (Biological Resources) of the DEIR, specifically, under Impacts #4.6-1, #4.6-2, and #4.6-4. To the extent the County is pre-empted from the regulation of timber operations by State law, mitigation of wildlife habitat impacts associated with timber operations is the responsibility of the California Department of Forestry and Fire Protection. See also response to comment #4-08 and Master Response B (Jurisdiction).

Response to Comment #4-10:
The comment incorrectly describes the conclusion of the DEIR. Section 4.8 (Agricultural and Timber Resources) of the DEIR concludes under Impact #4.8-4 (Timberland Conversion) that the loss of about 3000 acres of timberland through conversion to non-timber uses would not be a significant impact because it represents only a very small portion (approximately one percent) of the County's timberlands. Although timberland conversion in the 1800s and early 1900s was extensive in Sonoma County, very little conversion has taken place in recent decades. The estimated 3000 acres is largely the result of an increase in vineyard planting on the higher elevations in the northeastern part of the County.

The comment may be referring to the impacts of the Draft GP 2020 land uses and development, including timber harvesting, agriculture, and other rural uses, on wildlife habitat, which are addressed in Section 4.6 (Biological Resources) and in Section 6.2 (Cumulative Impacts) of the DEIR. These sections identify the loss of habitat (including forests) as a significant impact both at the project level and cumulatively in spite of additional Draft GP 2020 policies included in Sections 3.1 and 3.2 of the Open Space and Resource Conservation Element that would reduce the impact.

Response to Comment #4-11:
See response to comment #4-08 regarding the County's ability to propose rules and regulations for timber operations.

Response to Comment #4-12:
See response to comment # 4-08. The DEIR describes the Draft GP 2020 proposed streamside conservation areas in Section 4.6 (Biological Resources) in Exhibit #4.6-5.

Response to Comment #4-13:
Identification of the potential impacts of land uses and development under Draft GP 2020 on wildlife habitat and movement opportunities is provided in Section 4.6 (Biological Resources) of the DEIR. This includes a review of the effectiveness of policies in addressing direct loss of existing habitat and the fragmentation and obstruction of opportunities for native species movement and dispersal. Cumulative impacts are identified in Section 6.2 (Cumulative Impacts).

Policy OSRC-7i calls for a comprehensive study of habitat fragmentation, connectivity loss, and the effects of exclusionary fencing on wildlife movement. Recommendations for additional policies to protect essential habitat corridors and to improve opportunities for native plant and animal dispersal would be developed from this study, if warranted. Policy OSRC-7b requires a site assessment and adequate mitigation for discretionary projects. The California Department of Fish and Game would be one of the trustee agencies to receive the referral called for under these policies, and use of a conservation

easement or other mitigation strategies could be considered as part of project review. In addition, Draft GP 2020 supports the use of conservation easements of all types, including those intended to protect habitat.

Response to Comment #4-14:
The suggested regulations would be a new mitigation measure for Draft GP 2020. Draft GP 2020 already provides adequate policy mitigation for vegetation removal associated with allowed land uses. As noted in Section 4.5 (Hydrology and Water Resources) of the DEIR, existing regulations in combination with Draft GP 2020 policies would result in reduction of most water quality impacts to a less than significant level. These policies are included primarily in the Water Resources and Open Space and Resource Conservation Elements, and to a lesser extent in the other elements.

However, Draft GP 2020 impacts on water quality from agricultural and resource uses (Impact #4.5-3) and Draft GP 2020 impacts on some biological resources in Section 4.6 (Biological Resources) of the DEIR would be significant. In these cases, discretionary review of all grading permits would enable a more rigorous review of some land uses and would, therefore, reduce impacts to biological resources. However, since many land use practices do not currently require discretionary permits, such an ordinance would have the effect of requiring lengthy public hearings and permit review for traditionally ministerial activities such as agricultural production, building permits, and other activities, such as those requiring only the issuance of a grading permit. In addition, subjecting these ministerial permits to discretionary review under CEQA would likely prove infeasible for several reasons. The increased cost and time associated with the added permit processing would adversely affect the viability of agricultural production, overwhelm the County's available resources to staff these permit processes, and unnecessarily increase the cost of housing.

Instead, the Board of Supervisors has directed preparation of a grading ordinance that would reduce water quality impacts through the use of standards that apply to ministerial actions. With respect to biological resources, Draft GP 2020 relies upon a broader program in Policy OSRC-7i and OSRC Program #16 to first identify biotic habitat at a countywide level and then to develop mitigation programs to address habitat impacts using this information. These programs would address cumulative biological impacts much more effectively than discretionary review of individual project grading activities. See also Master Response E (Extent of Significant Impacts).

Response to Comment #4-15:
Draft GP 2020 includes Policy OSRC-7i and OSRC Program 16 which call for a comprehensive habitat mapping of the County in order to determine habitat values on a broader scale. Whether the study leads to an NCCP, an HCP, or some other management approach, the Draft GP 2020 provides the appropriate policy support for such an approach. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #5-01:
Current County General Plan goals, objectives, and policies supporting City-centered growth are proposed to remain in place in Draft GP 2020. In fact, City urban growth boundaries adopted since 1989 have been used in establishing revised Urban Service Boundaries in the Draft GP 2020 Land Use Element.

Response to Comment #5-02:
The County acknowledges the City's desire to implement the Draft Sebastopol Road Urban Vision Plan. The County has been working with the City staff to determine how best to implement the essential elements of the plan in a way that works in both the City and County General Plans and Zoning Codes. Since that implementation strategy has not yet been decided, it is premature to incorporate the Draft Plan into GP 2020. However, the following policy is recommended in Section 3.5 of the Land Use Element in order to support continued cooperation on this issue:

> "Policy LU-16z: Work with the City of Santa Rosa and residents and businesses in the Roseland area to implement the Sebastopol Road Urban Vision Plan."

Response to Comment #5-03:
The Draft GP 2020 does not assume that a regional/subregional traffic mitigation fee will be adopted; rather, its policies express support for such a fee as an important mitigation measure for reducing the traffic impacts of future land uses and development allowed by the County and the cities. As noted in the response to comment # 2-07, the nexus for such a fee has been established in the traffic analysis conducted as part of this DEIR. The Draft GP 2020 acknowledges the need for more detailed traffic analysis in order to establish each jurisdiction's fair share of the cost of improvements attributable to existing and future development in Section #6 of the Circulation and Transit Element. It also anticipates working through the Sonoma County Transportation Authority (SCTA) and its member cities to establish the proposed fee or other funding.

Response to Comment #5-04:
Comment noted. A water supply analysis has been prepared by the County PRMD staff working with applicable water suppliers as part of the formulation of Draft GP 2020 and the DEIR. See Master Response P (Urban Water Management Plan).

Response to Comment #5-05:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. The referenced Policy LU-14o is in the current General Plan.

Response to Comment #5-06:
The majority of industrial and commercial development in Planning Area 5 is planned for areas near the Sonoma County Airport and is outside of the City of Santa Rosa Urban Growth Boundary. It is assumed that City annexation, in combination with limited remaining development potential in the unincorporated areas, will result in a net reduction of 4,316 residential units in Planning Area 5.

Response to Comment #6-01:
The comment's specific concerns appear in later comments and are addressed in responses to those comments. There are several possible reasons for the level of detail or commitment in the Draft GP 2020, including feasibility, jurisdiction, and the nature of the General Plan as a general policy document. See also Master Response B (Jurisdiction), Master Response C (Program EIR/Level of Detail), Master Response D (Effectiveness of Mitigation Measures), and Master Response F (Explanation for Lack of Mitigation Measures).

Response to Comment #6-02:
This comment, as well as subsequent comments, refers to Exhibit #2.0-1 (Summary of Findings), which is a table listing impacts of the proposed plan, the new or revised policy mitigation measures proposed in the DEIR, and the impact significance before and after mitigation. Policies already incorporated into Draft GP 2020 that serve to mitigate a particular impact are too numerous to list in the table. Details regarding which policies are considered to mitigate a particular impact are provided in the impact discussions in Chapter 4 of the DEIR. Policy OSRC-7r, now OSRC-7q, to implement the Santa Rosa Plain Vernal Pool Ecosystem Preservation Plan, is discussed under Impact #4.6-1 (Special Status Species). However, that impact is concluded to be significant and unavoidable; therefore the program has not been relied up to conclude that the impact is less than significant. See also Master Response D (Effectiveness of Mitigation Measures) regarding the weight given to policies or programs that are uncertain to be funded in determining whether or not those policies or programs effectively mitigate the identified impact.

Response to Comment #6-03:
The Draft GP 2020 provides broad policy direction to help guide land uses and development through 2020 and beyond. The DEIR is a program level EIR as defined in CEQA Guidelines Section 15168(a). As such, the water quality impact analysis in Section 4.5 (Hydrology and Water Resources) has also been completed at a program level, including an analysis of the impacts of all of the land uses and development under Draft GP 2020 on water quality and water resources and the adequacy of proposed policies to reduce and mitigate these impacts. All of the impacts identified in Enclosure #1 are included in

the DEIR's analysis at a program level of detail. The level of review in a Program EIR is necessarily much broader than a typical project level review. Policies intended to mitigate an impact identified in a program EIR for a general plan are considered fully enforceable mitigation measures under CEQA if they are incorporated into the plan itself (Pub Res Code § 21081.6(b) in CEQA Guidelines § 15126.4(a) (2)). See also Master Response C (Program EIR/Level of Detail) and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #6-04:
See Master Responses B (Jurisdiction) and D (Effectiveness of Mitigation Measures).

Response to Comment #6-05:
See Master Response A (DEIR Review Period).

Response to Comment #6-06:
Comment noted. Since no reasons are stated for the objection to the DEIR's conclusion, no further response is possible.

Response to Comment #6-07:
Comment noted. Since no reasons are stated for the objection to the DEIR's conclusion and no additional feasible mitigation measures are identified in the comment, no further response is possible.

Response to Comment #6-08:
As noted and described in Section 4.5 of the DEIR, the existing Vineyard Erosion and Sediment Control Ordinance regulates vineyard cultivation in the County in order to address erosion and sedimentation, The ordinance prohibits vineyard cultivation on slopes over 50% and requires an erosion control plan for sloped areas less than 50%. The DEIR recommended that additional technical assistance programs and BMPs on slopes between 35% and 50% be included as a policy in order to provide additional mitigation for peak runoff and drainage on these slopes. The additional mitigation is deemed necessary due to the high potential for sedimentation on these slopes, particularly if they are subjected to ripping beneath the hardpan soil layers. The Planning Commission agreed that the existing VESCO ordinance is adequate to mitigate erosion and sedimentation problems on slopes up to 35%, but added this new mitigation measure as Policy WR-1j of the Draft Water Resources Element. The Commission did not agree that vineyard cultivation should be a discretionary use on these slopes. They felt that the combination of existing regulations requiring an erosion control plan in addition to the technical assistance and BMPs were sufficient to address the water quality issue and that public hearings would add unnecessarily to the cost of compliance for agricultural production. In addition, the Board of Supervisors has recently directed preparation of a comprehensive grading ordinance that will be addressing a broad range of erosion and sedimentation issues.

Response to Comment #6-09:
The comment that development is being driven into areas where community wastewater treatment is not available is not correct. Development in rural areas is limited by County land use policies. However, the County cannot unilaterally prohibit all development on septic systems. In fact, if it were to attempt to implement such a policy, it would likely necessitate extension of sewer systems to rural areas, contrary to the longstanding policies to reduce urban sprawl. To the extent that rural development is allowed, it is subject to modern standards for septic systems, package treatment plants, and other wastewater disposal systems allowed by the Regional Boards and local ordinances. The County's ability to abate impacts from existing disposal systems is limited by available funding, opposition by property owners, legal limitations, and other factors. A good example is the difficulty of providing a sewer system for the community of Monte Rio. Draft GP 2020 includes Policy WR-1p that calls for actively pursuing abatement of failing septic systems that have been demonstrated as causing a health and safety hazard. Until the obstacles can be overcome, it is unlikely that abatement of the uses involved is feasible. In addition, pursuant to California Assembly Bill 885, which requires the SWRCB to develop statewide regulations for onsite wastewater treatment systems, the County will be required to monitor new non-standard (alternative systems such as mounds) wastewater systems. In most cases, the County already requires this. See also response to comment #6-22.

Response to Comment #6-10:
As noted in response to comment #6-02, this comment makes reference only to the Summary of Findings in Exhibit 2.0-1, which does not attempt to list all the many policies and programs already included in Draft GP 2020 that serve to mitigate impacts; these policies and programs are described in the various impact discussions in Chapter 4 of the DEIR. Contrary to the comment, the DEIR does not conclude that Draft GP 2020 will result in the decline of groundwater levels. Rather, it describes in Section 4.5 (Hydrology and Water Resources) that not enough is known about groundwater conditions throughout the County to determine whether or not declines will occur in the future. The DEIR therefore takes the conservative approach of concluding that the impact is significant and unavoidable. In addition, Section 3.2 of the Draft Water Resources Element provides policy direction for a countywide groundwater planning effort as suggested by the comment, including participation in comprehensive groundwater studies currently underway in many parts of the County (such as Sonoma Valley, Alexander Valley, and the Santa Rosa Plain) in cooperation with the USGS and the Sonoma County Water Agency. The comment's suggestion that the Draft GP 2020 include water conservation policies has also been addressed through Draft GP 2020 policies in Section 3.4 of the Water Resources Element. See also Master Response R (Groundwater Management), Master Response E (Extent of Significant Impacts), and response to comments #7-02 and #7-19.

Response to Comment #6-11:
As noted above, by referring only to the summary chart of findings in Exhibit #2.0-1, the comment has not taken account of the policies and programs in Draft GP 2020 that also serve to mitigate potential impacts. However, Section 4.5 (Hydrology and Water Resources) under Impact #4.5-8 provides a description of the full menu of policy mitigation measures already incorporated into Draft GP 2020. Draft GP 2020 policies, particularly in Section 3.6 of the Water Resources Element, support watershed approaches to addressing drainage and other water issues.

Response to Comment #6-12:
Streams and rivers have many beneficial uses, one of which is to function as a conveyance system for stormwater runoff from agricultural lands, urban areas, and open space lands. Impact #4.5-8 focuses on the potential for changes in drainage patterns to lead to streambank erosion. It does not equate streams and rivers with "storm drain systems." See also responses to comments #6-2 and #6-11. With respect to past flooding and the construction of stream modification projects, the DEIR acknowledges these in its discussion of flood control and floodplain management on pages #4.5-30 and #4.5-31.

Response to Comment #6-13:
See responses to comments #6-02 and #6-11 regarding the limits of the chart to which the comment refers. The chart only identifies new or revised mitigation measures beyond those already included in Draft GP 2020. In regards to protecting other smaller waterways such as ephemeral streams and headwaters, these currently are addressed in the County's existing grading, erosion control, and drainage codes and standards as well as Draft GP 2020 policies calling for additional stream protection, drainage controls, flood management, etc.. Section 4.5 (Hydrology and Water Resources) of the DEIR addresses this impact and summarizes the relevant mitigating policies under Impact #4.5-9 on page #4.5-60. The current SCWA Flood Control Design Criteria distinguishes between significantly altered flood control channels, closed conduits, and natural channels and creek systems. As noted in response to comment #7-07, the SCWA is currently revising the Flood Control Design Criteria and may include additional protection of these types of waterways.

Response to Comment #6-14:
See responses to comments #6-02 and #6-11 regarding the limits of the chart to which the comment refers; the mitigations requested in the comment are already included in Draft GP 2020 and discussed in the Chapter 4 of the DEIR. Section 4.6 (Biological Resources) of the DEIR, under Impacts #4.6-1, #4.6-2, and #4.6-3, provides a General Plan level analysis of the potential impacts of land use and development consistent with the Draft GP 2020 on all special status species, sensitive natural communities, and wetlands, respectively. As discussed under these impact subsections, numerous policies have been included in the Draft GP 2020 that would address the impacts noted in the comment and provide for

identification, assessment, and mitigation for potential impacts on special status species.

With respect to the County's participation in the FishNet4C program, proposed Policy OSRC-7v (now OSRC-7t) provides the requested mitigation.

Response to Comment #6-15:
A discussion of wetlands and relevant regulations on the State and federal level is included in Section 4.6 (Biological Resources) on pages #4.6-24 and #4.6-25 of the DEIR, which acknowledges the increasing role of the California Regional Water Quality Control Board in regulating wetlands that are hydrologically isolated.

As indicated on page #4.6-18 of the DEIR, some wetland features, such as freshwater seeps, springs, and many of the vernal pools and swales have not been mapped. As stated on page #4.6-36 of the DEIR, "A site specific wetland delineation would be necessary to determine the extent of possible jurisdictional waters where wetlands may be present."

Policies in the Draft GP 2020 provide for the identification and protection of jurisdictional wetlands and other waters. Policy OSRC-7b addresses the need for further site assessment and appropriate mitigation if sensitive resources such as jurisdictional wetlands are encountered. This includes potential jurisdictional waters throughout the unincorporated areas of Sonoma County. As suggested by the comment, Policy OSRC-7b OSRC-7c, and OSRC-8i call for referral to appropriate regulatory agencies where sensitive resources could be affected. Numerous other policies address habitat identification, preservation and enhancement. Policy OSCR-7i calls for a comprehensive habitat identification and mapping program, which would include mapping of wetlands and other sensitive habitat types. Policy OSCR-7q calls for participation in a conservation strategy for endangered species in the Santa Rosa Plain. Policy OSCR-7r calls for developing comprehensive programs for preservation and restoration of marshlands in the county. Policy OSCR-7s calls for developing comprehensive programs for preservation and restoration of the San Pablo Bay area. Whether or not a Natural Community Conservation Plan is the appropriate vehicle to address habitat impacts in the County would be determined when the studies are completed and programs are implemented.

Response to Comment #6-16:
See Master Response T (Listing of Impaired Water Bodies). In addition, Section 4. (Hydrology and Water Resources), pages #4.5-16 and #4.5-17 are revised as follows:

> "Overall, Sonoma County is predominantly rural, with relatively few areas of intense development. Although anthropogenic land use changes have negatively impacted the water quality of some waterways in the county, water in the county is generally considered to be of good quality. While the EPA and the RWQCBs do not compile a list of waterways that have good water quality, they do compile a list of waterways that do not meet the water quality standards set forth by the EPA. The ~~seven~~ **nine** waterways in Sonoma County that have been placed on a Section 303(d) list by either the RWQCBs or the EPA are listed in **Exhibit 4.5-3**. These waterways are as follows: ~~Estero Americano; Gualala River; Russian River; Stemple Creek; Big Sulphur Creek; Petaluma River; and Sonoma Creek~~ **Estero Americano, Laguna de Santa Rosa, Lake Sonoma, Petaluma River, Russian River, San Antonio Creek, Santa Rosa Creek, Sonoma Creek, and Stemple Creek**. Additionally, San Pablo Bay, which receives water from the Petaluma River and Sonoma Creek, has also been listed as an impaired water body for ~~thirteen~~ **12** constituents. TMDL planning, which will address the water quality issues identified, is in the early stages of development for most of these watersheds. The most prominent water quality problems affecting waterways in the county are: (1) sedimentation and siltation; (2) nutrients; and (3) pathogens, or high bacteria levels. "

Response to Comment #6-17:
Comment noted. The DEIR discusses potential impacts to water quality, including in impaired waterways, under Impacts #4.5-1, #4.5-2, #4.5-3, and #4.5-4. Draft GP 2020 Policies WR-1a through WR-1v address countywide water quality impacts. See response to comment #6-16 and Master Response T (Listing of Impaired Water Bodies).

Response to Comment #6-18:
The comment is not clear about which policies are vague and unclear or lack assurance of implementation. Since this is a General Plan, and not a specific site development project, such policy language is typical. See Master Responses C (Program EIR/Level of Detail) and Master Response D (Effectiveness of Mitigation Measures). In the specific case of the Water Resources Element, many of the policies are written with recognition of the County's limited jurisdiction. For example, policies suggesting that the County work with the Regional Water Quality Control Boards to address water quality issues defer to the expertise and responsibility of those agencies and ultimately depend upon the Regional Boards' schedule for implementation. Tying every policy to an implementation schedule in the General Plan document itself is not feasible due to the number of programs included. Instead, the General Plan includes a program of tracking and reporting on the County's progress on all of its programs on an annual basis (see Land Use Element Objective LU-1.5 and Policy LU-1e). With respect to the recognition of wetlands as a component of the County's water resources, the Draft GP 2020 Water Resources Element includes Section 2.5, entitled "Biotic Resources and Water", which contains a reference to the Open Space and Resource Conservation Element wherein the value of wetlands is discussed and addressed.

Response to Comment #6-19:
Comment noted. The County is currently cooperating with water providers and other agencies and the public to complete assessments in the major groundwater basins and the proposed goals, objectives, and policies of the Water Resources Element support continuation of this priority. However, continuing and completing these studies will depend upon the availability of funding and other resources in the future. See also Master Response R (Groundwater Management).

Response to Comment #6-20:
The comment notes that Policy WR-1c regarding stormwater management measures does not include the requirement that discharges from municipal storm drains comply with water quality objectives. This objective is part of the NPDES program requirements. In response to the comment, Policy WR-1c is recommended to be revised as follows:

> "Policy WR-1c: Prioritize storm water management measures in coordination with the RWQCB direction, focusing first upon watershed areas that are urbanizing and watersheds with impaired water bodies. Work cooperatively with the RWQCBs to manage the quality and quantity of storm water runoff from new development and redevelopment in order to:
>
> (1) Prevent, to the maximum extent practicable, pollutants from reaching storm water conveyance systems.
>
> (2) Ensure, to the maximum extent practicable, that discharges from regulated municipal storm drains comply with water quality objectives.
>
> (3) Limit, to the maximum extent practicable, storm water flows from post development sites to pre-development quantities.
>
> (4) Conserve and protect natural areas to the maximum extent practicable."

Response to Comment #6-21:
Draft GP 2020 Policy WR-1e has been revised to delete the phrase "to the maximum extent practicable".

Response to Comment #6-22:
Former policy WR-1k, now WR-1l, coupled with Policy WR 1q, achieves the purpose advocated in the comment with respect to septic problem areas. In addition, Policies WR-1c, WR-1g, WR-1q, and WR-1r address groundwater quality problems. It is not feasible to abate a failing septic system without having some evidence or indication of a health hazard. If groundwater is being polluted in excess of standards, it would presumably form the basis for the County, acting in concert with the applicable regional Water Quality Control Board, to address the problem. Most likely, a number of steps would be taken to address

the problem before abating the system and the use, but it would depend upon the extent of the hazard. As a result, Policy WR-1o, now WR-1p, is appropriate as written. It is not possible to address a problem that is not known to exist.

Response to Comment #6-23:
This comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The language in Section 2.4 has been expanded as suggested in the comment and moved to Section 3.1 of the Draft GP 2020 Water Resources Element.

Response to Comment #6-24:
Comment noted.

Response to Comment #6-25:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Reference to the Regional Water Quality Control Boards has been added to this text under Section 3.1 (Marshes and Wetlands) as follows:

> "Wetlands meeting certain criteria are subject to the regulations of the U.S. Army Corps of Engineers, the US Fish and Wildlife Service (USFWS), CDFG, **or the Regional Water Quality Control Boards**."

Response to Comment #6-26:
This is a General Plan policy rather than code or ordinance language and procedure and thus is necessarily less detailed and specific. If Policy OSRC-7b is included in the Draft GP 2020, detailed implementation language would be added where necessary to county codes to carry out the policy. The Codes and procedures would establish the methodology for the assessment and mitigation, including how the necessary expertise would be obtained as well as appropriate reference to the requirements of any other agencies with regulatory oversight. For discretionary projects, the referral to the appropriate regulatory agencies would trigger the opportunity for those agencies to review the project and require appropriate permit approvals and mitigation measures.

Response to Comment #6-27:
As noted in the response to comment #6-19, this is a General Plan, a policy document rather than a site specific development project. As a result, a detailed timeline or schedule is not appropriate. Policy OSRC-7t represents a commitment on the part of the County to implement the FishNet 4C Program, but as with all County programs, the commitment is dependent upon the availability of funding and other resources in the future.

Response to Comment #6-28:
The background text of Section 3.2 does not distinguish the types of riparian corridors and therefore includes all streams. Proposed Policy OSRC-8e (now OSRC-8i) addresses protection of ephemeral streams as part of the discretionary approval process through referral to responsible agencies knowledgeable about their protection. The DEIR identifies this proposed policy mitigation measure under Impact #4.6-3 (Wetlands). See also response to comment #4-07.

Response to Comment #6-29:
Comment noted.

Response to Comment #6-30:
This is a General Plan policy rather than code or ordinance language and procedure and thus is necessarily less detailed and specific. If Policy OSRC-8c(6) is included in the General Plan, detailed implementation language, including any needed definitions, would be added to the county codes where necessary to carry out the policy. It should be noted that the prohibition in 8c(6) against "mechanical removal of vegetation" is specific to the use of the streamside conservation areas for grazing; 8c(1) provides a more general prohibition against vegetation removal and grading within streamside conservation areas except where necessary for one of the enumerated allowed uses. A blanket

prohibition on all vegetation removal is both impractical and, in some cases, illegal. For example, there are existing uses and/or structures within these areas that need to be maintained and there are property right protections governing situations where the restriction would deny reasonable use. County land use policy has also established the importance of the economic viability of agriculture, particularly in grazing areas where the returns are very marginal.

Response to Comment #6-31:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR.
Policy OSRC-8c would limit grading activities within all perennial and intermittent streamside conservation areas.

Response to Comment #6-32:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. While there may have been negative impacts to water quality resulting from lack of riparian protection in the past, the Draft GP 2020 biotic resource policies provide substantial new protection of these corridors, including regulation of agricultural cultivation. The comment is unclear as to what "other, more costly, non point source protection measures" may be needed. Draft GP 2020 does not rely solely upon increased riparian corridor protection to improve water quality. As noted in Section 4.5 (Hydrology and Water Resources) of the DEIR, additional policies in Section 3.1 of the Water Resources Element, along with existing and pending regulations, combine to mitigate most water quality impacts to a less than significant level.

Response to Comment #6-33:
Low Impact Development (LID) techniques could serve to reduce direct and indirect impacts on downstream receiving waters, serving to minimize the potential for sedimentation and streambank erosion, loss of mature trees and other riparian vegetation, and degradation of water quality and aquatic habitat. Regarding Policy PS-2l (now PS-2m), LID techniques can be useful in reducing the impacts of erosion and will be considered following adoption of GP 2020. The comment refers to the Draft GP 2020 Public Safety Element Policy PS-2l, which addresses potential flood hazards for future land uses and development. While this policy has an added benefit of reducing downstream flooding, other Draft GP 2020 policies in other elements address the impacts that would be reduced by the proposed revision. These latter policies can be found in the Water Resources, Open Space and Resource Conservation, and Public Facilities and Services Elements. In addition, with the exception of water quality from agricultural and resource uses under Impact #4.5-3, all water quality impacts from future land uses and development are identified as less than significant.

Response to Comment #7-01:
The DEIR in Section 4.9 (Public Services) analyzes the future water demand for all of the unincorporated County area, not just for the entities supplied by the Agency's system. The DEIR concludes that future water supplies for the unincorporated area that rely upon the Agency's system may not be available.
It is likely that a shortage would be addressed in one of several ways; increased reliance upon groundwater sources, demand reduction through additional conservation programs, and/or a moratorium on new development in areas where water supplies may not be available. The DEIR addresses the impacts of potential groundwater decline in Section 4.5 (Hydrology and Water Resources). This section notes the uncertainty over the existing groundwater conditions and the availability of these sources for future supplies and points to the Draft GP 2020 Water Resources Element as the County's strategy for working with water suppliers to manage groundwater resources at sustainable levels. This Draft element also includes water conservation policies in order to assist in reducing demand. See response to comment #7-02 and #7-03 for additional discussion of water conservation programs. Finally, the Draft GP 2020 and DEIR include policies that call for master plans and enable the adoption of moratoria on development where supplies are not adequate to serve development. See also Master Response S (Water Supply).

Response to Comment #7-02:
The following text is added to Section 4.9 (Public Services) of the DEIR, under "Adequacy of the SCWA's water supply" on Page #4.9-4:

> "Although the SCWA...service area. **The reliable capacity of the transmission system may be exceeded during periods of peak summertime demand**."

The DEIR discusses this issue under Impact #4.9-1.

The comment also notes that the Agency has requested that all of its water customers implement water conservation measures, recycled water projects, and/or increase reliance upon groundwater supplies during peak demand periods. While Sonoma County is not a public water supplier, the Draft GP 2020 and DEIR include water conservation policies in Section 3.4 of the Draft Water Resources Element, such as Policy WR-4e which requires that, among other things, new development incorporate water conserving plumbing and landscaping. These policies support the efforts of water suppliers to provide adequate supplies. WRE Program #11 has been added to the Water Resources Element to amend the County Codes as necessary to implement water conservation measures for new development.

Response to Comment #7-03:
See response to comment #7-02. The Draft GP 2020 Water Resources Element includes the following policies to increase water conservation and demand reduction in the three categories listed in the comment:

-Programs to promote the use of recycled water: Policy WR-4j calls for design of public wastewater systems to reclaim and reuse recycled water for agriculture, geothermal energy, landscaping, parks and public facilities, wildlife enhancement, and other purposes.

-Standards for water use efficiency: Policy WR-4e and the new Program 11 cited in response to comment #7-02 requires that water conserving plumbing and landscaping standards be established in the County Codes for all new development and in all new dwellings.

-Programs to facilitate the installation of reclaimed waterlines for recycled water use in new development: Policy WR-4k encourages graywater systems, roof catchment of rainwater and other methods of reusing water. The following additional policy is recommended in Section 3.4 of the Water Resources Element:

> "Policy WR-4l: Establish a program to revise County Codes to increase, where appropriate, the use of reclaimed water for new commercial, residential, and agricultural development"

Response to Comment #7-04:
The impacts of Draft GP 2020 on groundwater are addressed in Section 4.5 (Hydrology and Water Resources) of the DEIR, particularly under Impact #4.5-5. Section 3.2 of the Draft GP 2020 Water Resources Element incorporates goals, objectives, and policies that provide for sustainable groundwater usage.

Response to Comment #7-05:
Section 4.5 (Hydrology and Water Resources) of the DEIR identifies the SCWA as the local agency responsible for flood management of various waterways, both natural and constructed channels. Where development is proposed in areas of flooding, the County, under arrangement with the Agency, requires mitigation for flooding impacts. Policies in Section 3.3 of the Draft GP 2020 Public Safety Element rely upon this procedure and mitigation for development in potential flood hazard areas.

In addition, as described under Impacts #4.5-9, #4.5-10, and #4.5-11, the Draft GP 2020 Public Safety Element relies upon the FEMA flood maps as the basis for flood risk assessment and flood plain management in Sonoma County. Over time, these maps are revised to reflect the most current flood plain data available from FEMA. PRMD and the Agency are participants in the periodic review of these maps with FEMA. This updating and review system under Draft GP 2020, coupled with the current procedures for development review that include drainage review and referrals to the Agency on discretionary projects, provide sufficient mitigation for increased hazards that may result from changes to channel maintenance to protect habitat values of streams. These processes allow for hydraulic capacity analysis where

necessary to address the flooding impacts of the project.

Response to Comment #7-06:
See response to comment #7-05.

Response to Comment #7-07:
The DEIR discusses flooding impacts resulting from drainage system alterations in Section 4.5 of the DEIR under Impact #4.5-9 (Increased Flood Risk from Drainage System Alterations). This section identifies numerous policies, in addition to the use of the SCWA Flood Control Design Criteria that will reduce these impacts from future development to a less than significant level.

Response to Comment #7-08:
As noted in Section 4.5 (Hydrology and Water Resources) of the DEIR under Impacts #4.5-9 and #4.5-11, Draft GP 2020 land uses and development could contribute to additional flooding, either through runoff or through the placement of fill materials within flood plains.

The comment requests the specific waterways and levels of runoff and fill materials that are anticipated under Draft GP 2020. However, it is not feasible to produce this level of detailed data for a General Plan, particularly for a rural unincorporated area such as Sonoma County. This type of data would be appropriate in the analysis of a specific development project (see Master Response C (Program EIR/Level of Detail)). The Draft GP 2020 establishes policies that would regulate proposed County land uses and development in order to assure that flood hazards are not increased due to runoff and fill. All of these policies are identified in the above sections of the DEIR, but the primary policies are PS-2e that addresses the placement of fill materials in flood hazard areas and PS-2g, PS-2h, PS-2m, and WR-1c that address stormwater runoff.

Response to Comment #7-09:
As suggested, the referenced sentence in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "The North Coast RWQCB**, Sonoma County Water Agency,** and several other agencies have monitored the water quality of the Russian River watershed since the early 1970's".

Response to Comment #7-10:
Page #4.5-8 of the DEIR is revised to delete the subject line.

Response to Comment #7-11:
The two sentences are not inconsistent. The sentence on page #4.5-8 states that both recreational users and malfunctioning septic systems "contribute to" the introduction of fecal coliform bacteria, not that they are the sole source. The sentence on page #4.5-17 expands on the aforementioned sentence by stating that coliform bacteria is "normally found in the intestines of humans" (which can then be passed into human waste), and that "pathogens enter water through wastewater discharges, leaking septic systems, and from animal waste…."

Response to Comment #7-12:
As suggested, the referenced sentence in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "The Austin Creek subbasin is located in ~~east~~ **west**-central Sonoma County."

Response to Comment #7-13:
As suggested, the referenced sentence in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "Flooding in the lower reaches of the Laguna de Santa Rosa is from backwater effects during major flooding along the Russian River and is a significant problem along low-lying areas in the

~~City~~ **cities** of Sebastopol **and Rohnert Park**."

Response to Comment #7-14:
The term "non-intensive" agricultural production was meant to convey the idea that this area is not intensively farmed, that is, there are few cultivated field and row crops. The land is primarily used for dry farmed hay production and pasture for dairy cattle, some beef cattle, and sheep. The comment is correct in that modern dairy operations require significant efforts to manage concentrations of animal and dairy wastes from feeding, loafing, and milking areas, and that these wastes represent a significant source of potential water quality contaminants.

Based upon the above, the referenced sentence on page #4.5-14 of Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "Virtually the entire Stemple Creek ~~subbasin~~ watershed is in non-intensive agricultural production, predominantly dry farmed hay production and pasture. Dairies and beef and sheep livestock ranches are the mainstay of the subbasin economy**, while intensive agriculture, such as cultivated crop production, is limited**."

Response to Comment #7-15:
Comment noted. As suggested, the referenced sentence on page #4.5-17 in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "Giardia and cryptosporidium are also pathogens that are occasionally found in public water supplies and have the potential to cause serious illness among people**; however, rarely has cryptosporidium been identified in the Russian River**."

Response to Comment #7-16:
See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #7-17:
As suggested, the referenced sentences on pages #4.5-19 and #4.5-20 in Section 4.5 (Hydrology and Water Resources) are revised as follows:

> "Land areas vary widely in their recharge capability depending on soil conditions**, topography,** and the underlying geology. "

> "In some cases, multiple aquifers occur, separated by less permeable or impermeable (clay) layers called ~~aquacludes~~ **aquitards."**

> "Groundwater provides an important portion of the water supply for the **unincorporated areas of the county in addition to** the cities of Sonoma, Sebastopol, Cotati, Rohnert Park, and Petaluma."

Response to Comment #7-18:
Regarding the term "safe yield", it is similar to the term used in the glossary to the 2005 Department of Water Resources California Water Plan Update. Draft GP 2020 utilizes the term "sustainable yield" for purposes of the project and this term is defined in the Draft GP 2020 glossary as "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.

Response to Comment #7-19:
The comment is correct that comprehensive evaluation of groundwater conditions is currently being conducted by the Agency and USGS in the Santa Rosa Plain area. Studies have also been completed in the Alexander Valley Groundwater Basin and in the Sonoma Valley Groundwater Sub-basin. The $1.975 milion study in the Santa Rosa Plain is being funded by the Agency, USGS, the County, the California American Water Company, the Town of Windsor, and the Cities of Santa Rosa, Cotati, Rohnert Park, and Sebastopol. See also Master Response R (Groundwater Management).

Response to Comment #7-20:
As suggested, the referenced sentence on page #4.5-20 in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "When the rate of groundwater withdrawal exceeds the rate of recharge and occurs over a prolonged period of time, groundwater levels can drop ~~dramatically~~ and the aquifer may become overdrafted."

Response to Comment #7-21:
As suggested, the referenced sentence on page #4.5-21 in Section 4.5 (Hydrology and Water Resources) is deleted. See response to comment #7-22.

Response to Comment #7-22:
As suggested, the referenced sentence on page #4.5-21in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "The land area above the ~~cone of depression~~ **localized area of decreased water level caused by pumping** is called the area of influence. If the **localized areas of groundwater decline resulting from** the pumping ~~cones of depression~~ of two or more adjacent wells ~~overlap~~ **coincide**, there is said to be well interference."

Response to Comment #7-23:
As suggested, Exhibit #4.5-5 on page 4.5-23 of Section 4.5 (Hydrology and Water Resources) is revised as follows:

Groundwater Basin (subbasins in italics)	**Surface Area (square miles)**	**Groundwater Availability Class(es)**	**Notes**
Alexander Valley			
Cloverdale Area Groundwater Subbasin	10	I & IV	Groundwater elevations generally stable with localized decline in some areas**; USGS completed basin study in 2006.**
Alexander Groundwater Subbasin	37	I, III, & IV	Groundwater levels relatively stable**; USGS currently conducting studies.**
Kenwood Valley	8	I	Some concerns over local well interference effects and water level declines**; USGS mostly completed basin study of Sonoma Valley in 2006..**

Response to Comment #7-24:
As suggested, the referenced text on page #4.5-25 of Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "The subbasin adjoins the Petaluma Valley subbasin to the south, in the Penngrove area. **SCWA, USGS, the County, the Califronia American Water Company, the Town of Windsor, and the Cities of Santa Rosa, Cotati, Rohnert Park, and Sebastopol are currently conducting a study to characterize groundwater conditions within the Santa Rosa Valley Groundwater Basin."**

Response to Comment #7-25:
As suggested, Section 4.5 (Hydrology and Water Resources) is revised as follows:

> ~~"Water levels have stabilized somewhat since the early 1990s, with recharge and pumping currently thought to be in rough equilibrium. In recent years,~~ As a result of the City of Rohnert Park ~~switched~~ switching its primary source of municipal water supply from groundwater to water supplied by the SCWA, ~~W~~**w**ater levels have stabilized somewhat since the early 1990s**, with recharge and pumping currently thought to be in rough equilibrium."**

Response to Comment #7-26:
As suggested, the referenced sentence on page #4.5-27 in Section 4.5 (Hydrology and Water Resources) is deleted.

Response to Comment #7-27:
The referenced text is accurate as stated. No revision is necessary.

Response to Comment #7-28:
As suggested, the referenced sentences on page #4.5-28 in Section 4.5 (Hydrology and Water Resources) are revised as follows:

> ~~"Bennet~~ Bennett Valley is located approximately three miles south of Santa Rosa~~. The area is located within the Napa – Sonoma Volcanics Groundwater Basin, but~~ **and contains an alluvial aquifer**. Growth and vineyard development that uses groundwater may have strained the limited available water in this area.
>
> ~~To address groundwater basin issues, the Sonoma County Board of Supervisors directed County staff~~ **The Board of Directors of the SCWA directed staff** to work with the USGS~~, the SCWA,~~ and other local stakeholders to develop a cooperative study work program to systematically evaluate groundwater resources within the county's major groundwater basins (the Sonoma Valley, Alexander Valley, Santa Rosa Plain, and the Petaluma Valley basins)."

Response to Comment #7-29:
As suggested, the referenced sentence on page #4.5-29 in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "The cooperative study **by the USGS and SCWA** is intended to enhance the current knowledge of groundwater resources within Sonoma County and to provide an objective, comprehensive, and scientifically based evaluation of groundwater conditions in the four major groundwater basins."

Response to Comment #7-30:
As suggested, the referenced sentence on page #4.5-37 in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "In California, surface water rights are regulated by the State, while groundwater **can be** ~~is managed~~ **regulated** by a variety of local entities with a wide array of regulatory authority."

Response to Comment #7-31:

As suggested, the referenced sentence on page #4.5-39 in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "There are no adopted groundwater management plans in Sonoma County. Recently however, the ~~SCWA~~ Board **of Directors of SCWA** ~~directed the General Manager/Chief Engineer to prepare~~ **approved** a work plan ~~of Board consideration detailing the steps necessary~~ to develop a groundwater management plan under AB 3030 for the Sonoma Valley."

Response to Comment #7-32:
Draft GP 2020 Water Resources Element Policy WR-2c has been modified to be less specific about the proposed well permit requirements. The policy to develop new well permit requirements was retained, but is revised to leave the details of the regulations to subsequent revisions of the county codes and related groundwater monitoring. See also Master Response R (Groundwater Management).

Response to Comment #7-33:
Policy WR-1w (now WR-1v), has been revised to reflect the fact that the Agency is responsible for establishing flood control design criteria.

Response to Comment #7-34:
Policy PS-2s (now PS-2t), has been modified to reflect the fact that the SCWA is a special district. It now "requests" that the Agency prioritize and undertake flood hazard mitigation projects. Accordingly, page #4.5-63 of the DEIR is amended as follows:

> "Implementation of Policy PS-2~~s~~**t** would ~~require~~ **request that** the SCWA be responsible for prioritizing and undertaking flood hazard mitigation…"

Response to Comment #7-35:
As suggested, the referenced sentences on pages #4.5-66 and #4.5-67 in Section 4.5 (Hydrology and Water Resources) are revised as follows:

> "Larger dams whose potential failure could cause severe inundation include the Warm Springs Dam built by the Army Corps of Engineers in 1983 at the confluence of Warm Springs Creek and Dry Creek, and the Coyote **Valley** Dam built in 1958 on the East Fork Russian River in Mendocino County."

> "However, it is recognized that the levees along the Russian River below Coyote Valley Dam are the responsibility of the Corps of Engineers. **Additionally, the SCWA maintains levees in the Alexander Valley along the Russian River."**

> "Levees in these areas probably represent the greatest risk of levee failure, and several farm levees along the lower Petaluma River and Sonoma Creek failed during flood events as recently as ~~1998~~ **2005**."

Response to Comment #7-36:
As suggested, the referenced sentence on pages #4.9-7 and #4.9-8 in Section 4.9 (Public Services) is revised as follows:

> "In addition to the primary water customer contractors described above, SCWA has agreements to transmit or indirectly provide water to three other types of customers. The first group consists of the users, other than the ~~primary~~ water ~~customers~~ contractors, which have direct connections to the Agency's transmission system. This group includes ~~the Town of Windsor,~~ **the Forestville Water District,** community water supply systems for the Kenwood, Penngrove and the Larkfield-Wikiup-Airport areas, the Lawndale Mutual Water Company, and other water companies, parks, and government users. Since these customers use small amounts of water on an infrequent, supplemental basis, it is not possible to accurately estimate demand.

A second type is the Marin Municipal Water District (MMWD), a large user which is connected to the south end of the transmission system. MMWD receives a portion of its water supply from the Agency pursuant to separate agreements and is not a signatory to the Agreement for Water Supply. To ensure that adequate capacity is included in the transmission system, MMWD's entitlement of 12.8 mgd is included in the total SCWA transmission system capacity needed for the future.

The third type of "other SCWA customer" is water suppliers who are authorized to divert water directly from the Russian River and report it under the Agency's water rights permits. This group includes the ~~Town of Windsor,~~ City of Healdsburg, Russian River County Water District, ~~and~~ Camp Meeker Parks and Recreation District, **and Occidental Community Services District**."

Response to Comment #7-37:
As suggested, the referenced sentence on page #4.9-9 in Section 4.9 (Public Services) is revised as follows:

"The District's extractions from the Russian River underflow **are expected to be** authorized and reported under SCWA's water rights permits **in the future**."

Response to Comment #7-38:
As suggested, the referenced sentence in Section 4.9 (Public Services) is revised as follows:

"Occidental ~~Water Company~~ Community Services District: The ~~Company~~ **District** serves the Occidental USA and adjacent users in the Coleman Valley Road area. The water source historically was wells, but the ~~Company~~ **District** now has a connection to the Camp Meeker system described above."

In addition, Exhibit #4.9-8 of Section 4.9 (Public Services) is revised as follows:

Area / Service	**Facilities Adequacy to Serve Growth Allowed by General Plan Land Use Map**			
	More than Adequate	**Adequate**	**Adequate with Concerns**	**Significant Concerns**
Occidental Urban Service Area				
Water: Occidental ~~Water Company~~ **Community Services District**		**X**		~~X~~
Sewer: Occidental County Sanitation District				X

In addition, Section 4.9 (Public Services) is revised as follows:

"The Occidental USA is served by the Occidental ~~Water Company~~ **Community Services District**."

Response to Comment #7-39: (NB)
As suggested, Exhibit #4.9-5 of Section 4.9 (Public Services) is revised as follows:

Water Company	**Total Water Use in Million Gallons**				
	1998	**1999**	**2000**	**2001**	**2002**
Sea Ranch Water ~~System~~ **Company**	84.3	80.9	118.4	78.0	98.7
Bodega Bay Utility District	132.3	125.0	127.6	123.4	140.8
Occidental Community Services District a	9.7	10.6	7.7	8.6	-
Geyserville Water ~~System~~ **Works**	59.7	63.8	64.9	61.8	-

In addition, Exhibit 4.9-8 of Section 4.9 (Public Services) is revised as follows:

Area / Service	Facilities Adequacy to Serve Growth Allowed by General Plan Land Use Map			
	More than Adequate	**Adequate**	**Adequate with Concerns**	**Significant Concerns**
Water: Sea Ranch Water ~~System~~ **Company**		X		

Response to Comment #7-40:
As suggested, the referenced sentence on page #4.9-33 in Section 4.9 (Public Services) is revised as follows:

> "Recycled water is wastewater that has undergone primary, secondary, and ~~occasionally~~ **often** tertiary treatment."

Response to Comment #7-41:
As suggested, the referenced sentence on page #4.9-33 in Section 4.9 (Public Services) is revised as follows:

> **"Exhibit 4.9-9** presents basic information about the 11 existing sanitation zones and wastewater service providers in the county, all of which are managed by SCWA, with the exception of the Bodega Bay Public Utility District**, Graton Community Services District**, and Forestville. The Sonoma Valley County Sanitation District (CSD) treatment facility **and Penngrove Sanitation Zone are** ~~is~~ located within the jurisdiction of the San Francisco Bay RWQCB."

Response to Comment #7-42:
The comment is noted. Although updated information regarding wastewater treatment and disposal is available, the DEIR information is accurate as indicated. Revised tables are not necessary in order to understand the capacity status for each of the districts. Over time, the status of these services will continue to change as growth occurs and as the systems are upgraded or expanded. Draft GP 2020 is a policy document that relies upon the Public Facilities and Services Element, including Policies PF-1a, PF-1b, and PF-1d, to track and respond to changes in capacity status in cooperation with the special districts that provide these services. Capacity status has changed in the past and will continue to change over time. Since the Draft GP 2020 and DEIR conclusions are based upon a broader and longer term view, specific detailed changes are not needed to understand the impacts of service delivery addressed in this section and they do not give rise to the need for policy changes.

In addition, footnote "b" has been revised to state:

> "Average dry weather flow, **in most cases**, is the lowest average total flow over a period of 30 consecutive days."

Response to Comment #7-43:
The DEIR conclusions cited in the comment are not contradictory. Impact #4.9-1 is a significant impact under both the Draft GP 2020 and the No Project Alternative. The impact of the No Project Alternative would be "slightly less" than under the Draft GP 2020 because some of the additional uses allowed in the Urban Service Areas by Draft GP 2020 (e.g., additional affordable housing) would not occur. Both the existing general plan and the Draft GP 2020 contain policies that will reduce the impact, with the Draft GP 2020 providing greater reduction through policies that place greater emphasis on coordinated water supply planning, increased conservation, and water supply protection. However, in neither case is the impact reduced enough to be considered less than significant.

Response to Comment #7-44:
The conclusion that the No Project Alternative would result in a significant impact to existing water supply and treatment facilities applies to the entire unincorporated area of the County. The statement that the

impact could vary reflects the fact that circumstances differ in each water supply system and location. See Master Response C (Program EIR/ Level of Detail).

Response to Comment #7-45:
The DEIR conclusions cited in the comment are not contradictory. Impact #4.9-4 (Increased Wastewater Treatment Demand) is a significant impact in both the Draft GP 2020 as well as the No Project Alternative. This impact would be "slightly less" for the No Project Alternative than under the Draft GP 2020 for the reasons stated on page #5.0-33 (less affordable housing sites, less land use changes, and less rural uses on package treatment plants under the No Project Alternative). However, the impact is not reduced enough to be considered less than significant.

Response to Comment #7-46:
This comment has been withdrawn (personal communication from Marc Bautista, Sonoma County Water Agency staff, December 11, 2006).

Response to Comment #7-47:
As suggested, the referenced sentence on page #5.0-74 in Section 4.9 (Public Services) is revised as follows:

> "Similar to the Draft GP 2020, the ~~No Project~~ **Mitigated** Alternative would result in a significant impact to well water supplies."

Response to Comment #7-48:
The comment suggests the Mitigated Alternative should have analyzed the potential impacts to water quality if the construction of new wastewater systems was not implemented to accommodate planned growth. Although the comment refers to Impact #4.9-3, the reference should be to Impact #4.9-5. The potential impact to water quality if new or expanded wastewater facilities are not constructed was analyzed under the Mitigated Alternative on page #5.0-68 under Impact #4.5-4. The Mitigated Alternative specifically found this impact less than significant due to an increased emphasis on wastewater management, a reduced number of package treatment plants and failing septic systems in the rural area, and the fact that the absence of wastewater system capacity would result in limiting new development.

Response to Comment #8-01:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment will be forwarded to the decision making bodies for their consideration.

Response to Comment #8-02:
Comment noted. As explained on page #5.0-65 of the DEIR, the Mitigated Alternative not only includes additional road capacity, but also increased transit and non-vehicular modes of travel. In addition, it includes Clean Air Transportation Control Measures (TCMs) that would result in fewer emissions of ozone precursors. It should also be noted that the proposed roadway capacity improvements are consistent with the Countywide Transportation Plan accepted by MTC. These improvements are necessary to meet *current* travel demand. As noted in the Draft GP 2020 Circulation and Transit Element, future growth will largely be dependent upon improved transit and passenger rail supplemented by pedestrian and bicycle travel and transit oriented development.

Please note that the DEIR identified the Mitigated Alternative as environmentally superior, not the Draft GP 2020 Alternative. See page #5.0-80.

Response to Comment #8-03:
Most of the recommended TCMs are proposed as part of the Draft GP 2020 Circulation and Transit Element. See below:

TCM10: This is reflected in Policies CT-1e, CT-2r, CT-2w, CT-3d, CT-3i, CT-3j, and CT-6gg

TCM13: This is reflected in Policies CT-1d, CT-1e, CT-2b, CT-2m, CT-2n, CT-2e, CT-2t, and CT-2z

TCM15: Sonoma County's existing Zoning Code includes a provision (Section 26-86-010 (i)) that allows a reduction in parking based upon available transit.

TCM16: The following policy is recommended for Section 8 of the Open Space and Resource Conservation Element to integrate TCM 16 into Draft GP 2020:

> **"OSRC-16m: Provide education and outreach to the public regarding the Air Quality Districts' "Spare the Air" Programs."**

TCM17: This is reflected in Policies CT-2e, CT-2s, and CT-2s

TCM18: This is reflected in Policies CT-2e, CT-2r, CT-2s, and CT-2r

Response to Comment #8-04:
Impact #4.3-3 (Exposure to Odors/Toxic Air Contaminants) is identified as a less than significant impact with the incorporation of additional policy mitigation. As noted on page #4.3-7, most TACs in Sonoma County are located in the incorporated cities. The most common sources of TACs located in the County are dry cleaners and gasoline stations. Draft GP 2020 includes Policy OSRC-16k, now OSRC-16i, that requires buffers for all new sources of TACs or odors. In addition, Policy OSRC-16l, now OSRC-16k, addresses the concern over TACs from Hwy 101, the only significant source of mobile TACs in the unincorporated area.

With respect to inclusion of a map of TAC sites in the General Plan, there are no available data or analyses to determine where all possible TACs sites are located. In addition, such a map is not only unnecessary in a General Plan, it would require processing of a General Plan amendment every time an existing site was remediated or a new site was discovered.

Response to Comment# 8-05:
The Draft GP 2020 Open Space and Resource Conservation Element Policy OSRC-16l is recommended for revision as follows to further reduce Impact #4.3-4:

> "Policy OSRC-16l: Work with the applicable Air Quality districts to adopt a diesel particulate ordinance**. The ordinance should prioritize on site over off site mitigation of diesel particulate emissions in order to protect neighboring sensitive receptors from these emissions."**

Response to Comment #8-06:
The DEIR addresses the impacts of particulate matter emissions in Section 4.3 (Air Quality). Existing County regulations address dust related impacts through the project review process, with advice from the applicable agency responsible for air quality. Potential toxic air contaminants are addressed under Impact #4.3-3 of the DEIR. In addition, Policies OSRC-16-h, OSRC-16i, and OSRC-16j have been added to the Draft GP 2020 Open Space and Resource Conservation Element to further reduce the pollutants that might result from land uses and development.

Response to Comment #8-07:
The Draft GP 2020 Open Space and Resource Conservation Element includes Objective OSRC-14.4 and Policies OSRC-14d, OSRC-14f, OSRC-14g, and OSRC-14h that support reduction in future greenhouse gas emissions. See also Master Response N (Climate Change).

Response to Comment #8-08:
The DEIR identifies the impacts of Draft GP 2020 land uses and development on the environment. It also identifies mitigation measures in the form of policies and analyzes whether or not the policies/measures would reduce the impacts to a less than significant level. In compliance with CEQA and the CEQA Guidelines, the rationale for not adopting mitigation measures that are determined to be infeasible will be identified and explained in the in findings made by the Board of Supervisors as part of the approval of GP

2020, rather than in the FEIR. See also Master Response F (Explanation for Lack of Mitigation Measures). A copy of the responses to the District's comments will be provided as requested.

Response to Comment #9-01:
The Draft GP 2020 DEIR is a program level document and analyzes impacts at the county-wide level; project-specific mitigation measures will be identified and implemented through the environmental review of those projects, pursuant to the goals, objectives, and policies in the general plan. See Master Response C (Program EIR/Level of Detail) and Master Response D (Effectiveness of Mitigation Measures). Impacts to state highways are addressed in Impact #4.2-2 (Congestion on State Highways), which explains that impacts could remain significant and unavoidable despite recommended policies for a number of reasons, including lack of community support for widening certain highways, the uncertainty of future funding, and secondary environmental impacts of capacity improvements. As suggested in the comment, Draft GP 2020 policies in the Circulation and Transit Element, including Policies CT-1m, CT-1n, CT-1o, CT-5b, CT-5c, CT-5d, and CT-5f, support the establishment of regional transportation mitigation fees.

Response to Comment #9-02:
Comment noted. The Draft GP 2020 Circulation and Transit Element includes Policies CT-5e, CT-5f, and CT-5g that accomplish the stated purpose in the comment. In addition, many of the unavoidable congestion impacts of future development are due to development in the cities where mitigation cannot be imposed by the County of Sonoma. See also Master Response B (Jurisdiction) and Master Response F (Explanation for Lack of Mitigation Measures).

Response to Comment #9-03:
The County develops and maintains a bicycle and pedestrian plan for the county in coordination with the Sonoma County Transportation Authority (SCTA). The Draft GP 2020 Objective CT-1.4 supports alternate modes of travel in order to reduce the need for future automobile use by a combination of improvements and incentives that favor alternate modes over automobile use. Objective CT-2.9 would develop bicycle and pedestrian facilities in urban communities in order to promote cycling and walking as transportation modes to connect neighborhoods and community services. Policy CT-2y would implement the Sonoma County Bikeway Plan as described in the Draft GP 2020 Open Spaces and Resource Conservation Element, recognize the bicycle as an essential transportation mode, and utilize the Bikeway Plan as a key implementation measure for the circulation and transit system.

Response to Comment #9-04:
Comment noted.

Response to Comment #9-05:
As requested, Steve Colman of Dowling Associates (the EIR transportation analyst) contacted Lisa Klein of MTC on 11-9-2006 via telephone. Ms. Klein confirmed that MTC no longer does regular monitoring of Highway 12. However, it is generally believed there is little or no congestion on the freeway portions of Highway 12, except that related to backups on the transition ramps to Highway 101 in Santa Rosa.

Response to Comment #10-01:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. In the event that an application is received by the County for an affordable housing project on any of the sites selected for such use in the area served by the Town, the County will send a referral to the Town as is standard project review procedure for a water supplier. As part of its own requirements prior to approval of water service, the Town could require the recommended audits.

Response to Comment #10-02:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the DEIR. However, the County currently consults with the Town regarding projects affecting the Town. Development project applications submitted to the County are referred to the Town for review and comment when the proposed project is within the sphere of influence of the Town or within the area for which the Town provides sewer or water service. This referral process allows the Town to raise any issues that it deems

appropriate prior to the project being considered for approval. The County anticipates continuing this process in the future. In addition, the proposed Draft GP 2020 includes revision of the Urban Service Boundary to conform to the Town's Urban Growth Boundary (UGB). As a result, the County will be using the UGB for determining when referrals are sent to the Town.

Response to Comment #10-03:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been provided to the decision making bodies for consideration.

Response to Comment #10-04:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Currently, referrals are sent to the Town of Windsor for development of any kind, including telecommunication facilities, within one mile of the incorporated limit. The County anticipates continuing this procedure. PRMD is also available to meet with Town staff assist in whatever way is necessary. The comment has been provided to the decision making bodies for consideration.

Response to Comment # 10-05
The Town of Windsor's concerns regarding the protection of groundwater quality and water supply from mining activities are noted. Mining operations are considered to be part of the land uses and development under Draft GP 2020. Water quality and other water resource impacts are addressed in Section 4.5 (Hydrology and Water Resources) of the DEIR. Draft GP 2020 policies require the environmental impacts of any mining proposal to be assessed and mitigated to the degree feasible and require mining operations to comply with the policies, procedures, and standards in the Aggregate Resources Management (ARM) Plan. These policies also require the phase-out of terrace mining in the well field area.

Response to Comment #10-06:
Comment noted. Policies CT-1m, CT-1n, CT-1o, CT-5b, CT-5c, CT-5d, and CT-5f provide policy support for establishing regional transportation mitigation fees. These policies call for "fair share" fees to be assigned proportionally between jurisdictions, and fees would be shared by projects in all jurisdictions that create regional impacts. Assuming a nexus is established between future development in the Airport Industrial Area and congestion in the Town of Windsor, these policies would require the County to pay its fair share towards improvements within the Town.

Response to Comment #10-07:
Comment noted.

Response to Comment #10-08:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Support for Policy CT-6g (now CT-6m) is noted. The recommended change has been made to Program 6: Capital Project Plan/Budget in the Circulation and Transit Element to clarify that County development would also be a contributor to transportation improvements.

Response to Comment #10-09:
Support of Policy CT-6d is noted.

Response to Comment #10-10:
The recommended changes including the Sonoma County Airport Industrial Area as a customer of the Water Project have been made to the Draft GP 2020 Water Resources Element.

Response to Comment #10-11:
Comment noted. The proposed policy WR-3n has been modified to read as follows:

> "**Encourage** public water suppliers who currently utilize water from the SCWA system to balance their use of surface water and groundwater so that environmental impacts and impacts on other legal water users are minimized."

Response to Comment #11-01:
Contrary to the comment, the DEIR does not state that the additional 7.71 square miles designated as within the 55 to 60 dB contours results from expansion of the Sonoma County Airport. Rather, the DEIR states that this increase in the amount of lands within the "conditionally acceptable" noise category results from implementation of the more restrictive noise standard proposed in the Draft GP 2020 Air Transportation Element (ATE). The projected noise contours in the ATE are taken from the Airport Land Use Commission's (ALUC's) Comprehensive Airport Land Use Plan (CALUP). As noted in Section 4.4 (Noise) of the DEIR; these contours include existing residential uses within both the unincorporated area and the Town of Windsor. Under the regulations of the Airport Land Use Commission (ALUC), the Town of Windsor would be responsible for ensuring that land uses that are approved by the Town to be constructed both within the Town and within the noise contours provide appropriate noise mitigation and comply with the ALUC standards.

Response to Comment #11-02:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. As provided in Program 3 of the Draft GP 2020 Air Transportation Element, the County would be responsible for notifying the ALUC when airline flights approach or exceed the ALUC projections. It would then be the responsibility of the ALUC to update its projections and standards through an amendment of the Comprehensive Airport Land Use Plan. It is also possible that the update of the Airport Master Plan that is currently underway will include revised forecasts that would also trigger the need for updating the Plan.

Response to Comment #11-03:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #11-04:
Airport noise impacts (Impact #4.4-5) are discussed in Section 4.4 (Noise) of the DEIR. The DEIR assesses noise levels consistent with the ALUC's Comprehensive Airport Land Use Plan (CALUP). Noise levels between 55-65 dBA CNEL are considered "conditionally acceptable". The CALUP and the Sonoma County General Plan both establish compatibility levels for noise sensitive development as 65 dBA, provided an interior noise standard of 45 dBA is satisfied. On the basis of these standards, the DEIR conclusion regarding the significance of these impacts is justified. Draft GP 2020 Air Transportation Element Policy AT-3e includes the continuation of the complaint reporting system for the Sonoma County Airport. The suggestion that a public brochure be made available with contact information for reporting noise complaints has already been implemented by the Sonoma County Airport.

Response to Comment #12-01:
The comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. The comment has been submitted to the decision making bodies for consideration.

Response to Comment #12-02:
The comment refers to the County's integrated procedure for review of Draft GP 2020 and its EIR. It is accepted CEQA procedure that comments on the DEIR are submitted and presented to the decision making body for their consideration during the review of the project; this applies to a general plan EIR as well. In fact, the CEQA Guidelines recognize that a draft general plan and the EIR may be prepared as a single document (see CEQA Guidelines § 15166.) If the decision making bodies make substantial revisions to the Draft GP 2020, the analysis in the DEIR will be reviewed to determine whether substantial changes are required that would trigger recirculation according to the criteria in CEQA Guidelines section 15088.5 (see Master Response J (Recirculation). In addition, the Planning Commission's recommendations regarding Draft GP 2020 will be presented and heard by the Board of Supervisors at a future public hearing, thereby providing interested agencies and the public with another opportunity to comment on the Draft GP 2020 policies before final adoption.

Response to Comment #12-03:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #12-04:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The proposed policies in the Draft GP 2020 Open Space and Resource Conservation Element would substantially increase stream protection in the County compared to policies presently in effect. The policies have been amended in order to restrict uses within the Stream Conservation Area unless a conservation plan has been approved by the County that provides mitigation for impacts to a wide array of riparian functions applicable to a given site. Such a policy must also be implemented in a manner that recognizes private property rights on the site.

Response to Comment #12-05:
The comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. It should be noted that the studies of County streams conducted for Draft GP 2020 found that none of the trustee agencies responsible for various aspects of riparian corridor protection had sufficient data regarding the location of streams with defined bed and bank for the County to administer a ministerial permit system for stream protection. As a result, the Draft GP 2020 includes protection for all known streams as well as all other unknown streams that may be associated with projects requiring discretionary approval from the County. See also response to comment #4-07.

Response to Comment #12-06:
Comment noted. The comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. The comment has been provided to the decision making bodies for consideration.

Response to Comment #12-07:
The comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 Open Space and Resource Conservation Element Policies OSRC-8o and OSRC-8k encourage and support educational programs and technical assistance for cattle and grazing operations in protecting riparian corridors, as recommended by the comment.

Response to Comment #12-08:
The comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. Policy OSRC-8(2) (c) would only allow for expansions of existing nonconforming uses under very limited circumstances, including that there be no net loss of habitat. Policy OSRC-8c (2)(d) is intended to avoid a constitutional taking of private property by permitting some development if the setback would otherwise render the parcel unbuildable, provided a site assessment is done, vegetation removal is minimized, and there is no net loss of habitat.

Response to Comment #12-09:
Exhibit #4.6-2 in Section 4.6 (Biological Resources) of the DEIR shows the location of known or suspected streams with listed fishery resources. This includes mapping of both Sonoma Creek and the Petaluma River. Policy OSRC-7i calls for a comprehensive habitat identification and mapping program for use in future policy considerations, which would include an update of mapping for anadromous fishery resources. Policy OSRC-7e calls for regular review and updating of Biotic Habitat Areas.

Response to Comment #12-10:
Comment noted. See response to comment #12-09.

Response to Comment #12-11:
Comment noted. The suggestion can be handled by PRMD as an administrative matter and need not be a GP 2020 policy.

Response to Comment #12-12:
The comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. Policy WR-1c does not limit the institution of stormwater management measures to urban areas. Rather it suggests that urban areas and watersheds with impaired water bodies should be addressed as a higher priority due to the greater threat to pollution from runoff in these watersheds. Sedimentation from roads

and bridges, etc is addressed by Policy WR-1b.

Response to Comment #12-13:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Policy PS-2g, PS-2h, PS-2k, and PS-2m of the Draft GP 2020 Public Safety Element and Policies WR-1c, WR-2e, and others of the Draft GP 2020 Water Resources Element address the impacts of peak flows, runoff, and flooding. However, the policies would require that new development or redevelopment maintain existing recharge rather than increasing it. To the extent the comment suggests that new development should be required to increase rather than maintain existing groundwater recharge rates, it should be noted that this may not only be infeasible due to the natural limitations of soil and geologic conditions, but may not be legally justifiable under CEQA. See also response to comment #6-33.

Response to Comment #12-14:
Comment noted. The suggestion can be handled by PRMD as an administrative matter and need not be a GP 2020 policy.

Response to Comment #12-15:
Comment noted.

Response to Comment #12-16:
Comment noted.

Response to Comment #12-17:
The DEIR concludes that no additional mitigation is required to address the potential impact on water quality from saltwater intrusion because the impact is less than significant for the reasons stated on page #4.5-56. The Draft GP 2020 Water Resources Element provides goals, objectives, policies, and programs that will improve the knowledge and understanding of groundwater conditions over time, including saltwater intrusion. In addition, Policies WR-1t and WR-1u specifically address saltwater intrusion as part of development projects and environmental documents, including the development of a groundwater management plan where monitoring indicates saltwater intrusion has occurred. Finally, a cooperative USGS study of groundwater conditions in Sonoma Valley that evaluated saltwater intrusion has led to the initiation of a groundwater management plan in the Valley

Response to Comment #12-18:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision makers for their consideration. It should be noted that proposed Policy WR-1b provides general guidance for future County actions to address erosion and sedimentation through best management practices. It would not be appropriate to specify FishNet4C in the General Plan, since there may be other standards that are more effective for development other than roads and utilities. The detailed standards can be determined when they are established in County procedures or ordinances.

Response to Comment #12-19:
Comment noted. The comment pertains to a policy issue regarding Draft GP 2020 and not to the adequacy of the DEIR. It should also be noted that the Flood Control Design Criteria are under the jurisdiction of the Sonoma County Water Agency, a Special District under State law, and not Sonoma County. As a result, the policy provides for the County to request that the Agency modify the Design Criteria.

Response to Comment #12-20:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #12-21:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. The details of this policy

will be determined when the County codes are revised to implement it.

Response to Comment #13-01:
Comment noted.

Response to Comment #13-02:
Comment noted. The County has already begun the process of updating the Local Coastal Plan (LCP). Once the GP 2020 is adopted, the Draft LCP will be revised and submitted for Coastal Commission review and comment.

Response to Comment #14-01:
See Master Response A (DEIR Review Period).

Response to Comment #14-02:
Section 4.5 (Hydrology and Water Resources) of the DEIR addresses the water quality impacts of wastewater disposal under Impact #4.5-4. The potential health and environmental impacts of wastewater discharge of pharmaceuticals and other unregulated products such as estrogenic substances are not fully known or well understood at this time. However, waste discharges, or changes in discharge quantities and locations, are the responsibility of wastewater system providers rather than the County of Sonoma and are regulated by the applicable Regional Water Quality Control Board. The Draft GP 2020 Water Resources Element includes Policies WR-1b, WR-1d, WR-1f, WR-1g and others calling for addressing water quality issues associated with wastewater systems.

Response to Comment #14-03:
The impacts of Draft GP 2020 on parks and recreation services are addressed in Section 4.9 (Public Services) of the DEIR. It is unclear how recreation activities would be affected by future proposals by water suppliers to increase reliance upon the Russian River to meet urban water demands. However, all current and proposed diversions for the Russian River for water supply purposes are required to meet minimum flow standards intended, among other purposes, to provide for appropriate recreational uses of the river, such as fishing and boating. As noted in response to comment #237-100, Draft GP 2020 does not propose to reduce Russian River flows, nor do any of the agencies responsible for Russian River water use. In the event that reductions in Russian River flow are proposed in the future, they would be subject to review by the appropriate agencies responsible for entitling water supply diversions, including review for impacts on recreational uses in the Russian River.

Response to Comment #14-04:
See response to comment #7-01. Standard project review procedures for the County provide public water suppliers an opportunity to comment on proposed development applications. If, at any time, a public water supplier does not have the capacity to service a proposed project, the supplier can so inform the County. Such a referral would be considered in the decision on the project and would likely prevent the project from being approved or built. In addition, the Draft GP 2020 includes policies, such as Policy WR-3i, enabling the County to establish a moratorium on development in any area where water supplies are not available for future projects.

Response to Comment #181-01:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Since the project includes amendments to the Area and Specific Plans as necessary to conform to the General Plan, potential conflicts with the General Plan have been avoided. See also Master Response A (DEIR Review Period).

Response to Comment #218-01:
Since the boundaries of the Planning Areas are based upon Census Tracts, the population estimates and other demographic data are taken directly from the most recent US Census, the 2000 Census. The US Census Bureau residence rules define “usual residence” as the place where the person lives and sleeps most of the time. People who own more than one home are counted at the place where they live most of the time. People without a “usual residence” are counted where they are staying on Census day (April 1).

People without a "usual residence" include those without housing, college students, live-in nannies, military personnel, and migrant workers. Non-citizens who are living in the United States are included in the Census regardless of their immigration status.

Response to Comment #218-02:
Section 2.1 of the Draft GP 2020 Land Use Element notes that the 2000 Census identified 7,815 vacant units in the entire unincorporated area of Sonoma County, of which nearly 70% were for "seasonal, recreational or occasional use". The Russian River Planning Area had 9,345 total housing units with a 23.8% vacancy rate in the Year 2000 (based on Census data). Section 4.9 (Public Services) of the DEIR examines impacts to public services associated with growth projections. Sewer capacity studies in this section assume that all existing and future projected units are permanent occupancy.

Response to Comment #218-03:
This section is intended to provide a brief overview of the location of Sonoma County and each of the nine Planning Areas that comprise the County. This level of detail is sufficient for a Program EIR for a countywide General Plan. See Master Response C (Program EIR/Level of Detail).

Response to Comment #218-04:
The comment is referring to Section 3.1 of the DEIR (Project Location) which provides a brief overview of the location of Sonoma County and each of the nine Planning Areas that comprise the County. This section is intended to provide a description of the project being analyzed in the DEIR. More detailed information regarding the environmental setting and the impacts and mitigation measures is included in Section 4 of the DEIR. Water and sewer services are discussed in Section 4.9 (Public Services).

Response to Comment #218-05:
See response to comment # 218-04. The unincorporated communities of Camp Meeker and Occidental are located in Planning Area #1 (Sonoma Coast/Gualala Basin). The boundaries of the Planning Areas were established in prior General Plans and are based upon Census Tract boundaries. Using these tract boundaries allows the Plan to be sensitive to population, housing, employment and other demographic data that are not otherwise available.

Response to Comment #218-06:
See response to comment # 218-05. The selection of Planning Area boundaries has no bearing upon the degree to which the City of Sebastopol may or may not influence what happens in the Laguna de Santa Rosa area.

Response to Comment #218-07:
See response to comment #218-04. Information regarding the extent to which agricultural lands in the Laguna de Santa Rosa have been converted to vineyards is not relevant to this section of the DEIR. The conversion of agricultural land from one agricultural use to another is not considered an impact under the CEQA Guidelines. However, the impacts of land uses, such as vineyard development, allowed by the Draft GP 2020 are addressed in many subsections of Sections 4, 5, and 6 of the DEIR.

Response to Comment #218-08:
See response to comments #218-04, #218-05, and #218-06.

Response to Comment #218-09:
Section 3 of the DEIR is intended only as a brief overview of the most significant historical events affecting countywide land use and development issues in the County. The comment identifies several occurrences that, while important to particular areas of the County, do not generally rise to the level of countywide significance. The comment raises a good point with respect to the increase in water quality issues and regulations since the 1989 General Plan was adopted. As a result, the following "bullet" is added to the list on page #3.0-8:

> "…the increase in water quality problems in most of the County waterways and the resulting designations of stream impairments by the State Water Resources Control Board."

Response to Comment #218-10:
As with all of the goals of Draft GP 2020, they are interpreted and implemented through the underlying objectives and policies. These interpretations are made and applied by the appropriate County staff and decision making bodies. For example, protection of people and property from environmental risks and hazards is achieved through implementation of policies and programs in the Public Safety, Land Use, and other related Elements.

Response to Comment # 218-11:
Both of the terms ”unincorporated community” and ”rural community” are generic terms referring to small developed areas of the unincorporated County. Unincorporated communities would generally be distinguished from rural communities by the presence of public sewer systems. Such communities as Guerneville, Boyes Hot Springs, and Penngrove are unincorporated communities designated and zoned for an urban level of development. On the other hand, rural communities like Cazadero, Kenwood, and Freestone do not have public sewer. Although these terms are relatively inexact, it would be more appropriate to use the term ”rural area” rather than “rural community” in bullet #6 on page #3.0-13.

Response to Comment #218-12:
The goal of protecting people and property from environmental risks and hazards and limiting development on sensitive environmental lands is more fully described in Section 2.1 of the Land Use Element of the Draft GP 2020. This major goal is implemented through objectives and policies of several elements, primarily the Public Safety Element. Contrary to the comment, existing and proposed policies of these elements expressly limit new development in flood plains, on steep slopes, and on earthquake faults. However, these policies do not stop development completely and do not affect problems associated with previous development.

Response to Comment #218-13:
The comment refers to the goal of retaining large parcel sizes in agricultural areas. Agricultural land densities range throughout the unincorporated area from a high of 10 acres per unit to a low of 320 acres per unit. The applicable densities in the Laguna de Santa Rosa area also vary considerably depending upon the location but are shown on the Land Use Maps (Figures LU-2e, LU-2f, and LU-2g) of Draft GP 2020. The size of all of the existing parcels in Central Sonoma County has not been calculated.

Response to Comment #218-14:
The Draft GP 2020 projected growth is anticipated to be slow and will likely occur in a cyclical manner over the planning period. Available services and growth projections are planned in concert with each other, factoring in both growth trends and service availability. Because the policies and programs of Draft GP 2020 are of a programmatic nature, if growth is slower than anticipated, then it is likely that the impacts of land uses and development would occur more slowly and the rate of infrastructure expansion would be slower. See the Draft GP 2020 Land Use Element for a more in depth discussion of past and projected growth in the County. Section 5.0 (Alternatives) of the DEIR assesses impacts associated with alternative growth patterns.

Response to Comment #218-15:
Exhibit #3.04 of the DEIR and its counterpart in Draft GP 2020, Table LU-5, are based on Census 2000 population counts. These reflect actual household units and population for the Year 2000. Table 3 of the May 16, 2002, Citizen’s Advisory Committee Report on Population and Projections identifies the various ratios of persons per household associated with Cities and unincorporated Planning areas. Different household sizes reflect the nature of the occupancies in each area. For example, there may be more multi family development (with smaller average household sizes) projected in Santa Rosa than in Guerneville.

Response to Comment #218-16:
The impacts of future growth resulting from land uses and development allowed by Draft GP 2020 are studied at a countywide scale, which is the appropriate level of detail for a General Plan covering such a large geographic area. See Master Response C (Program EIR/Level of Detail). The adequacy of

services for Draft GP 2020 projected growth are addressed in Section 4.9 (Public Services) and the adequacy of services for the Buildout Alternative are addressed in Section 5.0 (Alternatives). See also Master Response J (Buildout) and Master Response H (Range of Alternatives).

Response to Comment #218-17:
See Master Response D (Effectiveness of Mitigation Measures), Master Response F (Explanation For Lack of Mitigation Measures), and Master Response E (Extent of Significant Impacts).

Response to Comment #218-18:
See Master Response G (Recirculation).

Response to Comment #218-19:
The DEIR makes no claims that a 3,000 square foot home on five to ten acres in Sonoma County could be purchased for $250,000. Rather the DEIR describes that between 1996 and 2000 the number of new rural homes built in the county with a construction *cost* of more than $250,000 went from ten to 43 as documented in the source sited in the footnote. The information reflects construction costs at the time the Notice of Preparation was filed (i.e., baseline conditions). The comment is correct that construction costs and real estate prices have continued to rise since that time, further exacerbating the problem of gentrification.

Response to Comment #218-20:
This section of the DEIR describes the proposed Draft GP 2020 changes in the designated Urban Service Boundaries, which set forth the County's policy for expansion of the sanitation districts in the future. Actual district expansion would come later and would be subject to review and approval of LAFCO.

Response to Comment #218-21:
Urban Service boundaries proposed in Draft GP 2020 are primarily determined by sewer service areas and potential expansion thereof. The boundaries establish the location of areas that are eligible for connection to both sewer and water.

Response to Comment #218-22:
Most of the added parcels are already in the respective districts. They do not include parcels that have Out of Service Area Agreements. The purpose of these designated boundaries is to establish County policy for city and community centered growth and eligibility to connect to the respective district. Parcels that are not currently in the district would be subject to hearings before LAFCO at the time that annexation is proposed. Draft GP 2020 Urban Service Boundaries are available on maps presented to the CAC, available for public review at PRMD, and will be shown on the adopted GP 2020 Land Use Maps.

The availability of future capacity of each of the County Urban Service Areas was analyzed in reports to the CAC. The summary analysis is included in Section 4.9 (Public Services) of the DEIR under the respective sections on Water Services and Wastewater Services.

Response to Comment #218-23:
This comment questions the DEIR's conclusion regarding the adequacy of the capacity of the Russian River County Sanitation District to serve the additional demand resulting from the growth allowed in the proposed new Urban Service Area (USA). The capacity of this sewer system to handle this demand is discussed in Section 4.9 (Public Services) under Impact #4.9-4. This section concludes that the District has more than enough treatment capacity for all future growth, but that disposal capacity is currently limited and in need of expansion to serve the additional demand. A proposed project to increase the disposal capacity is currently under consideration.

This expansion is necessary even without the expansion of the USA proposed in GP 2020. In addition, of the 34 parcels involved in the proposed expansion of the USA, twenty (20) are already in the District and developed and being served. Another thirteen (13) parcels are currently in the District and, although currently undeveloped, are eligible to develop without a change in the USA. Only one of the 34 parcels is

not currently in the District and is undeveloped. This means that the additional demand is limited to fourteen parcels. It should also be noted that, in the event that any of the properties were to propose development, the District would be contacted for approval of a sewer connection and would have the opportunity to delay or avoid the development if there was not enough capacity to serve it.

Response to Comment #218-24:
The quoted statement in the DEIR is accurate. Draft GP 2020 would add 20 developed parcels and 13 undeveloped parcels to this Urban Service Area. There is no set number of hookups that would automatically warrant a finding of significance. However, six potential new hookups (ESDs) to a system projected to accommodate over 3,400 hookups does not appear to constitute a significant expansion.

Response to Comment #218-25:
Data regarding the capacity of the Russian River County Sanitation District is presented in Section 4.9 (Public Services) under Wastewater Management Services and Exhibits #4.9-8 and #4.9-10. Additional detail is provided in PRMD staff reports to the CAC and Planning Commission. These data show sufficient treatment capacity for projected future growth as well as full buildout in the service area, but disposal capacity needs to be added.

Many parcels are likely to be unbuildable due to environmental constraints and/or the costs of development. However, the exact number of unbuildable lots is unknown and cannot be determined without exhaustive detailed study of the environmental conditions of each individual property, a level of detail unnecessary for a countywide General Plan EIR.

Response to Comment #218-26:
The DEIR identifies the need to expand certain portions of the Russian River County Sanitation District facilities in order to accommodate the projected growth. If these properties are annexed, it would not appear to result in the need for significant alterations to the size of the facilities. As noted under response to comment #218-22, the boundaries of the proposed expansion areas are mapped in the staff reports to the CAC and Planning Commission, available for public review at PRMD, and will be included on the adopted GP 2020 Land Use Maps.

Response to Comment #218-27:
The policy decision regarding the location of the Urban Service Area is made by the County of Sonoma as part of the Draft GP 2020. LAFCO is responsible for decisions regarding the applicable district's sphere of influence and annexations. The Draft GP 2020 proposed Urban Service Area boundaries are shown on a set of Urban Service Area maps available for public review at PRMD. The water providers serving the lower Russian River area may utilize this information should they choose to prepare an Urban Water Management Plan.

Response to Comment #218-28:
The projected growth for Draft GP 2020 is identified and discussed under Impact #4.1-1 in Section 4.1 (Land Use, Population, and Housing) of the DEIR. The projected population growth for the Russian River Planning Area is identified in Tables LU-2, LU-5, and LU-6 of the Draft GP 2020 Land Use Element and Exhibit #4.1-4 of the DEIR. Growth projections are not available for each community within the Planning Area, but this growth does assume that most of the lands that are included within designated Urban Service Areas will be connected to the applicable sewer system.

The map referenced in the comment reflects discussions held several years ago by the Russian River County Sanitation District and others about the possibility of expanding the district to include additional small parcels. However, this discussion has not resulted in any proposal or action by the District to annex these lands. The comment is correct that if additional lands are annexed to the sewer district, these lands would be then eligible for connection that may result in development that otherwise could not occur. However, Draft GP 2020 does not include any such proposals. As noted in the response to comment #218-23, proposed expansion of the designated Urban Service Area involves very few parcels, and most are already developed and in the District. If a larger area were to be proposed for annexation in the future, the proposal would require an amendment of the General Plan and accompanying environmental

review. At that time, the potential growth inducing impacts would be identified and addressed.

Response to Comment #218-29:
As the comment notes, sewer service to Monte Rio is included as part of Draft GP 2020. However, the decision to provide public sewer to this community was approved by the County several years ago and is consistent with the existing General Plan. The fact that the proposed sewer project has been delayed by both litigation and lack of funding does not alter the fact that it is current County policy to provide sewer to Monte Rio. The additional growth enabled by the provision of sewer was addressed in the EIR for the project and will be at least partially mitigated by the adoption of a growth management plan limiting the construction of new residential units on an annual basis.

Response to Comment # 218-30:
As noted in the response to comment #218-29, the provision of sewer service to Monte Rio is included in the existing General Plan and in Draft GP 2020. As a result, the projections for growth in the Russian River Planning Area anticipate the system being in place some time before 2020. If the system is not completed, the actual growth in the Planning Area may be less than what was projected.

The Draft GP2020 does not include policies that specify the type of public sewer system that could be built for this or any other wastewater management system that might be needed.

Response to Comment # 218-31:
See Master Response J (Buildout). In addition, the projected growth in residential units in Draft GP 2020 does not distinguish residential units by size or value. The household size anticipated in residential units over time is based upon trends which can be identified using census data.

Response to Comment #218-32:
The Russian River Planning Area has experienced a gradual increase over time in the conversion of former second homes that are occupied on a seasonal basis to permanent occupancy. Census data shows this trend. For purposes of projecting residential unit and population growth in the future, existing residential units are assumed to be year-round occupancy. In general, permanently occupied units would be expected to generate more traffic and higher demands on local services and utilities.

Response to Comment #218-33:
The growth projections utilized for Draft GP2020 are based upon many factors. However, a key factor is the land use designation, including residential density, of each parcel in the unincorporated area. For example, the projected numbers of residential units are less than the theoretical maximum number of units allowed by these designations. This is due to the fact that some landowners choose not to develop their properties, and some are not able to develop due to septic or other environmental constraints. The impacts of the Ultimate growth potential are analyzed in the Buildout Alternative in Section 5.0 of the DEIR. This alternative assumes that virtually all residential units allowed by the land use designations would be built by 2020. See also Master Response J (Buildout).

Response to Comment #218-34:
Guerneville and Forestville are the primary communities in the Russian River Planning Area that have public sewer and water systems and, as such, are designated for higher density development than those other areas that do not have sewer and water. The amount of growth that occurs in the area is dependent upon the remaining development allowed by the Draft GP 2020 land use designations.

Response to Comment #218-35:
As noted in the response to Comment #218-34, the land use designations and other policies of the Land Use Element go hand in hand with the projected growth in the unincorporated area and in each Planning Area.

The DEIR, in Section 4.9 (Public Services), discusses the available capacity of sewer and water services for the communities that are served by public systems. Exhibit #4.9-8 shows that the public water system for the Russian River Urban Service Area (which includes Guerneville) faces significant problems serving

future growth. That is not the case in Forestville. Unless the District serving Guerneville is able to secure additional water supplies, it may not be able to serve projected growth in its service area. In that event, the projected growth would likely not occur. Policies in Draft GP 2020 support the expansion of these services to meet projected demand and also support closer management of growth in the cases where capacity is not available.

Response to Comment #218-36:
See response to comment #218-35. Sonoma County does not provide sewer and water services to all of the Russian River Planning Area. Most services, in fact, are provided by Special Districts that operate independently of the County. However, the County does have authority over land use decisions in these areas. As a result, both current development review procedures and Draft GP 2020 Land Use and Public Facilities and Services Element policies would enable the County to take appropriate action to limit development in any case where service capacity was not available from the applicable provider.

Response to Comment #218-37:
The comment points out some of the problems associated with past development in the Russian River community. Many of these problems result from structures originally intended for short term seasonal occupancy that were not built to today's modern codes. Current building, septic, and other codes would require that structures be built to avoid or withstand geologic, soil, slope, or other constraints. As noted in the DEIR, those policies and codes would continue or be upgraded under Draft GP 2020.

Response to Comment #218-38:
Most areas in the County that are designated Urban Service Areas were already within sewer districts established years ago. As noted in the discussion of Urban Service Areas under Impact #4.1-1, these boundaries are not proposed for much expansion, regardless whether they are within flat or hillside areas. If services are not expanded due to environmental or economic constraints, then the small amount of projected growth would not occur.

Response to Comment #218-39:
As noted in earlier responses and Master Response B (Jurisdiction), the County does not have the authority to require Special Districts or other non-County entities to prepare and adopt master plans for public services; rather, this is encouraged by Policy PF-1b. However, plans for wastewater system improvements are subject to the review and approval of the applicable Regional Water Quality Control Board and are subject to review and comment by the County. As part of these review processes, the systems are thoroughly evaluated before approval by responsible agencies and the public, and are further subject to review by the County for conformity with the General Plan under Government Code Section 65402.

Response to Comment #218-40:
Improvement or upgrading of the wastewater systems in the west County would allow existing homes and businesses in these districts to be repaired, maintained, and improved. In addition, currently vacant lots might be able to support development allowed by the Draft GP 2020 land use plan, if the lots can comply with modern codes and development policies.

Response to Comment #218-41:
The comment is correct in that sewer services are not proposed for any significant expansion into outlying areas. But Draft GP 2020 does support improvement of these services for the lots within the Urban Service Areas. It also proposes to continue to allow properties with existing development experiencing a failing septic system to hook up if they adjoin the Urban Service Area. However, the strict criteria for these Out-of-Service-Area Agreements do not result in new units.

Existing lots recognized through the Certificate of Compliance process do increase the growth potential in the County, but Draft GP 2020 includes legally viable policies and procedures to reduce this potential within the confines of state law. Second units also add to the potential for growth, but are included in the growth projections of Draft GP 2020 and analyzed in the DEIR.

Response to Comment #218-42:
Standard project review procedures require that an available water supply be demonstrated for all lot splits and subdivisions. The Draft GP 2020 Water Resources Element Policy WR-3i provides support for moratoria in the event that a water supplier cannot provide adequate water for future development.

Response to Comment #218-43:
The DEIR analyzes the water supply and demand impacts of Draft GP 2020 in Section 4.9 (Public Services) under Impact #4.9-1. The impact analysis is based upon a broader long term view of the capacity of each of the water suppliers serving urban areas to supply water to serve projected growth within their respective service areas. This is the appropriate level of detail for the Countywide General Plan. The Draft GP 2020 Water Resources Element includes policies that commit the County to work with the non-County water suppliers to meet water demand, including during periods of drought and other low flow. Policies WR-3a, WR-3h, and WRT-3i are examples of such policies.

In the case of the water demands of the agencies that contract with the SCWA for water, any decision to impose a moratorium on new development due to water supply deficiencies would have to be based upon a determination by the agency that a problem exists and that it is of such magnitude that a moratorium is justified.

See also Master Response P (Urban Water Management Plans), Master Response C (Program EIR/Level of Detail), Master Response O (SB 221 and SB 610), and and Master Response S (Water Supply).

Response to Comment #218-44:
Comment noted. See also response to comments #218-24 through #218-41.

Response to Comment #218-45:
See response to comment #14-02.

Response to Comment #218-46:
Comment noted.

Response to Comment #218-47:
There is no new quantitative information that the DEIR authors are aware of, beyond the design level studies completed when the dams were constructed, that provides information on peak flow reduction as a result of dam construction. Many observers credit the presence of the dams (especially the Warms Springs Dam) with less severe flooding along parts of the Russian River during the severe flood events of 1995, 1998, and recently the Dec. 31, 2005 flood.

Urbanization in some watersheds has likely had an effect on peak flows and caused additional increases in flood heights. However, this is not the case in all watersheds because, for instance, the worst flooding typically occurs after a number of days of heavy rainfall, when the soils are saturated and unable to infiltrate and store additional rainfall. The adobe soils common to some parts of Sonoma County do not have significantly different runoff characteristics than paved surfaces during these events. The Draft GP 2020 Public Safety Element relies upon the use of FEMA flood mapping for flood management issues and calls for County participation in periodic updates of these maps in order to have the best available data on flooding patterns.

Response to Comment #218-48:
The information was presented to inform the reader about flood characteristics along the Russian River, relative to other areas in northern California, not to detract from the impact of flood conditions to those affected.

Response to Comment #218-49:
As suggested, the referenced paragraph in Section 4.5 (Hydrology and Water Resources) is revised as follows:

"The Russian River subbasin consists of roughly 237 square miles in central Sonoma County. The subbasin follows the course of the Russian River Valley floor as it curves and bends from the broader inland valley areas in north central Sonoma County, flowing southeast along US 101 to the narrow mountain flanked river corridor where it turns west along ~~Highway 116~~ **River Road** towards the coast. Major communities along the river include Cloverdale at the north end, Geyserville ~~and Healdsburg~~ in the Alexander Valley, Healdsburg, Mirabel Park, **and** Rio Del, ~~Guerneville and Monte Rio~~ in the ~~middle river corridor~~ **Middle Reach, Guerneville and Monte Rio in the Lower River**, and Jenner, where the river discharges into the Pacific Ocean."

Response to Comment # 218-50:
It is generally acknowledged that gravel mining activities conducted prior to implementation of the County mining regulations and Aggregate Resources Management (ARM) Plan, as well as other activities such as flood control and channel maintenance, have contributed to the past lowering of the Russian River channel. However, since that time, in-channel gravel extraction has been limited to removing the amount of gravel recharge. Monitoring reports prepared pursuant to the ARM Plan since the early 1980s indicate that the channel has not further degraded as a result of current mining operations and is in fact aggrading in some places. See also response to comment #252-26.

Response to Comment #218-51:
As suggested, the referenced paragraphs in Section 4.5 (Hydrology and Water Resources) are revised as follows:

"The Santa Rosa Creek subbasin is located eastern and central Sonoma County. This roughly T-shaped subbasin drains an area of roughly 81 square miles. Elevations range from approximately 2,000 feet MSL along the easternmost boundary of the subbasin to roughly 100 feet MSL near the westernmost boundary. Major streams and tributaries in the subbasin include Santa Rosa Creek, Spring Creek, Brush Creek, Matanzas Creek, ~~Colgan Creek,~~ and Rincon Creek.

The central region of the Santa Rosa Creek watershed is largely urbanized (35 percent of the subbasin). Vegetation in the lower or south limb of the watershed is generally oak woodland on the slopes of the Sonoma Mountains and above Bennett Valley; in the eastern limb, oak woodland and Douglas fir forest, with the western limb, cropland and pasture.

The climate of the Santa Rosa Creek subbasin is cool, with mean temperatures ranging from 47 degrees Fahrenheit in winter to 68 degrees Fahrenheit during summer months. Average annual precipitation is approximately 30 inches.

~~Floodplain areas near the confluence of Santa Rosa Creek and Mark West Creek are subject to flooding during the 100-year storm event.~~

The Laguna de Santa Rosa subbasin drains an area of 89 square miles in south-central Sonoma County with the upper watershed originally on the west-facing slopes of the Sonoma Mountains. In the upper portions of the watershed are the cities of Rohnert Park and Cotati, as well as Sonoma State University. The city of Sebastopol is located in the lower part of the Laguna subbasin. In the northern part of the subbasin, Laguna de Santa Rosa converges with Mark West Creek prior to flowing to the Russian River. Elevations in range from 50 feet in the north, approximately one-half mile south of Mark West Creek, to 1400 feet MSL at Taylor Mountain. The primary waterway is Laguna de Santa Rosa, with major streams and tributaries being Blucher Creek, **Colgan Creek,** Hinebaugh Creek, **Santa Rosa Creek,** Washoe Creek, and Gossage Creek.

Floodplain areas near the confluence of Laguna de Santa Rosa and Mark West Creek are subject to flooding during the 100-year storm event."

Response to Comment #218-52:
The comment regarding water quality of upper part of Santa Rosa Creek being better than the lower

portion, where it is impeded by elevated temperatures and other factors, is noted.

Response to Comment #218-53:
See response to comment #218-51.

Response to Comment #218-54:
See response to comments #218-51 and #218-55.

Response to Comment #218-55:
Comment noted. The comment is correct that the regional treatment plant discharges treated wastewater to the Laguna.

Response to Comment #218-56:
As the comment notes, flood channel maintenance has conflicted with habitat protection goals in the past and will likely continue to conflict in the future. However, this potential impact is not limited to the Laguna de Santa Rosa watershed, and is discussed in a countywide context in Section 4.6 (Biological Resources) of the DEIR. The third sentence of the second paragraph under Impact #4.6-1 is revised to read as follows:

> "The installation of vineyards, row crops, and other actively managed agricultural uses, timber harvesting, mining extraction, **channel maintenance**, and other activities could also result in the elimination of essential habitat for special-status species."

This section of the DEIR addresses the impacts of channel maintenance along with all of the other Draft GP 2020 land uses and development on Special Status species.

With respect to channel maintenance, the SCWA is responsible for maintaining numerous flood control channels. These activities are currently under review in light of endangered species listings. See also response to comment #7-05.

Response to Comment #218-57:
In response to the comment, the paragraph on page #4.5-11 is revised to read as follows;

> "Other major watershed management issues…include **the use of the Laguna for wastewater facilities and discharges**, protection of Laguna water quality…"

Response to Comment #218-58:
See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #218-59:
See Master Response T (Listing of Impaired Water Bodies). The impacts of Draft GP 2020 on surface water quality are addressed in Section 4.5 (Hydrology and Water Resources). Of particular note are Impacts #4.5-1, #4.5-2, #4.5-3, and #4.5-4. The updating of the 303(d) list of impaired water bodies does not significantly change the impact analysis because, as noted in the discussion at the beginning of Impact #4.5-1 on page #4.5-41, the DEIR already acknowledges that most of the major streams in the county have been characterized as impaired.

Response to Comment #218-60:
As the comment notes, other contributors of nutrients to water bodies include soluble nutrient salts from fertilization and lawn irrigation, stormwater runoff from urban areas and from wastewater systems. These contributors of nutrients to water bodies are acknowledged in the impact analysis in Impacts #4.5-1and #4.5-4

Response to Comment #218-61:
See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #218-62:
The DEIR focused on a discussion of non point source stormwater programs and issues as the County has a much greater amount of responsibility and control over stormwater management than point source discharges. Point source discharge is largely regulated by the applicable Regional Water Quality Control Board based upon the respective Basin Plan.

Response to Comment #218-63:
The following paragraph on page #4.5-35 in Section 4.5 (Hydrology and Water Resources) of the DEIR is revised as follows:

> "In addition to the NPDES program, the RWQCBs also implement the federally-mandated Total Maximum Daily Load (TMDL) program for each of the watersheds. The term TMDL is used by the RWQCBs and the EPA to identify, on a stream-specific basis, pollutant limitation standards. **The TMDL program is triggered by listing on California's Section 303(d) List of Water Quality Limited Segments.** Resource and regulatory agency staff use the term TMDL to refer to both the definition of the regulation and the planning process to achieve compliance, as well as the actual pollutant standard."

With respect to the California Toxics Rule, the State is responsible for implementing the water quality standards based on these federal criteria, in conjunction with each Regional Board's Basin Plan. Therefore, the County's influence in these areas is limited. However, based upon the above, the following subsection is added to page #4.5-35 in Section 4.5 (Hydrology and Water Resources) of the DEIR:

> "The California Toxics Rule establishes numeric water quality criteria for priority toxic pollutants. The Rule was instituted by the EPA to ensure California's compliance with the Clean Water Act by filling a gap in State water quality standards created in 1994, when a State court overturned the State's water quality control plans. The State is responsible for implementing the water quality standards based on these federal criteria in conjunction with each Regional Water Quality Control Board's Basin Plan."

Response to Comment #218-64:
The term "storm sewer" is used in the state and federal NPDES literature and implementing regulations, and has come to signify urban storm water runoff that is directed into a system of underground culverts and pipes, prior to its discharge to a surface water body. Very little if any of the stormwater runoff is typically treated, other than via settlement of soil particles in a sediment basin, or treatment in a bioswale.

More recently, technology has been developed and implemented to treat stormwater in key areas via diversion, treatment, and return flow, for instance by using UV and other approaches. Because of high costs, this is typically used only in key areas, such as stormwater discharges to important swimming beaches, where there has been a history of beach closure. Small engineered in-pipe treatment systems (e.g., Bay Saver and Fossil Filter systems) have also been developed that treat stormwater runoff by filtering, sedimentation, and oil / water separation technology. These are becoming more common, but sometimes require more frequent and costly maintenance. The comment is correct in stating that unincorporated communities are also subject to NPDES regulations, and the unincorporated South Park area of Santa Rosa is a part of the Santa Rosa Sub-Regional Wastewater Treatment and Disposal system.

Based upon the above, the paragraph on page #4.5-34 in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "Under Phase I of the NPDES stormwater program, all medium separate storm sewer systems (serving a population of 100,000-249,000) and large separate storm sewer systems (serving 250,000 or more) were required to obtain a municipal permit. Under Phase II of the NPDES program, small storm sewer systems are also required to obtain coverage under a Regional Board-issued permit as of August 8, 2003. A small storm sewer system is defined as any

unpermitted municipal separate storm sewer system located in an urbanized area with a population of 50,000 and a population density of 1000 per mile. In Sonoma County, the City of Santa Rosa and unincorporated urban areas surrounding Santa Rosa are part of the Phase I NPDES stormwater program area. All of the cities except Cloverdale and the unincorporated urban areas around Petaluma and Sonoma are in the Phase II program. **Unincorporated communities are also subject to NPDES wastewater regulations, such as the unincorporated South Park area of Santa Rosa, which is part of the Santa Rosa Subregional Wastewater Treatment and Disposal system."**

Response to Comment #218-65:
This is a level of detailed information that is not necessary for a General Plan and Program EIR. See also Master Response C (Program EIR/Level of Detail). The reviews in recent years have been delayed.

Response to Comment #218-66:
See responses to comments #218-62 through #218-65.

Response to Comment #218-67:
Comment noted. The text is intended to provide examples rather than an exhaustive list.

Response to Comment #218-68:
The impacts of wastewater disposal on water quality are addressed in Section 4.5 (Hydrology and Water Resources) of the DEIR under Impact #4.5-4, rather than under Impact #4.5-1.

Response to Comment #218-69:
Water quality impacts associated with wastewater disposal are discussed under Impact #4.5-4. Protection of waters and beneficial uses are provided primarily through the regulations and mandates of the applicable Regional Water Quality Control Board as presented beginning on Page #4.5-33 of Section 4.5 (Hydrology and Water Resources). Discharges of wastewater are typically limited to periods of higher flow so that the treated water is properly diluted. Draft GP 2020 includes the policies identified under Impact #4.5-4 that will contribute to reducing the potential impacts of wastewater discharge, regardless of the stream conditions or seasonality of the discharge or irrigation, by reducing or avoiding the discharge. Draft GP 2020 also includes policies that would assist in educating agriculture, business, and the general public about summer water use, such as WR-1a, WR-1f, WR-1j, WR-1r, and Section 3.4 of the Water Resources Element.

Response to Comment #218-70:
The DEIR preparers experience is that several regulatory agencies, including the Regional Water Quality Control Board, US Fish and Wildlife Service, and NOAA Fisheries, preclude the use of treated wood (in favor of recycled plastic lumber, for example) in issuing permits in especially sensitive environments. Most regulations now preclude use of treated wood in playgrounds and prohibit disposal at County landfills as a classified waste.

Response to Comment #218-71:
As noted in the response to comment #218-69, water quality impacts for wastewater disposal are discussed under Impact #4.5-4 and are subject to regulation by the applicable Regional Water Quality Control Board and the policies cited in that section. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-72:
Monitoring of water quality is conducted by the agencies responsible for water quality and water supply, such as the Regional Water Quality Control Boards, the Sonoma County Water Agency, other public water suppliers, USGS, and others. Even with these monitoring programs, it is difficult to say how effective the existing and proposed educational efforts will be. However, education is the only tool available to the County to address potential pollution from existing land uses, as they are not subject to the permitting and review process. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-73:
Comment noted. Such cooperation is driven by mutual interest, whether monetary or otherwise. However, Draft GP 2020 does not rely solely upon policies calling for cooperation in order to mitigate water quality problems. Draft GP 2020 includes such water quality policies in Section 3.1 of the Water Resources Element.

Response to Comment #218-74:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The policy means that, where appropriate, the County will support the Regional Board's efforts to assure that wastewater systems are managed and operated to protect water quality.

Response to Comment #218-75:
The DEIR includes an analysis of alternatives to Draft GP 2020 in Section 5.0 (Alternatives). The impacts of adopting less stringent stream protection policies are addressed in the Buildout Alternative. See Master Response H (Range of Alternatives).

Response to Comment #218-76:
There is a considerable volume of research on the topic of transport of toxic substances in waterways. Each toxic substance and each body of water have unique characteristics that govern the dilution, mixing, dispersion, solubility, transportation, uptake and absorption, as well as their toxic effects that can vary widely among exposed organisms. The discussion of water quality under Impact #4.5-1 makes no such presumption that the water quality impacts of land uses remain close to the source of the pollutants.

Response to Comment #218-77:
Contrary to the comment, the impacts to water quality from sedimentation and vegetation and tree removal related to construction, particularly on steeper slopes, are addressed in Impact #4.5-2, as well as in Impact #4.5-1. The DEIR concludes that these impacts will be reduced to less than significant through compliance with existing County building and grading requirements, the RWQCB's Phase II NPDES permitting requirements and TMDL program, and the policies and programs in Draft GP 2020 identified in the impact discussion.

Response to Comment #218-78:
The use of the term "to the maximum extent practicable" in this context means that the measures would be determined on a case by case basis, considering the proposed grading activity and the feasibility of the applicable requirements. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-79:
The intent of policies that encourage various actions or that include the provision "to the extent economically feasible" is to support educational efforts to improve land use practices and to provide flexibility in project review for addressing the environmental conditions on each property. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-80:
Future staffing levels and funding necessary to carry out Draft GP 2020 policies and programs are likely to be similar to current levels. Applicable Draft GP 2020 mitigation measures would be imposed at the time of project approval and enforced as part of any required Mitigation Monitoring Program. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-81:
The DEIR concludes that Impact #4.5-2 related to water quality from soil erosion and sedimentation associated with construction is less than significant based not only upon Draft GP 2020 policies, but also existing regulations. See response to comment #218-77. Applicable policies include WR-1b, WR-1g, WR-1h, WR-1q, and WR-1v. The details of how these policies would be developed and implemented would be determined as part of the implementation of Draft GP 2020, including the grading ordinance. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-82:
Contrary to the comment, this statement is accurate. The Sonoma County Water Agency and Russian River County Sanitation District are special districts that are not operated by the County of Sonoma. The County does not act as the SCWA.

Response to Comment #218-83:
Contrary to the comment, the Board of Supervisors is not the Board of Directors for the Agency. Rather, the members of the Board of Supervisors also sit as the members of the Board of Directors of the Agency.

Response to Comment #218-84:
Comment noted. The referenced sentence in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "Water quality problems associated with point source discharges from wastewater treatment plants have ~~historically been infrequent, occurring~~ **occurred** mostly along the Russian River."

Response to Comment #218-85:
Comment noted. Funding is critical to provision of adequate water and sewer service and other public infrastructure throughout all levels of government. Lack of funding is identified as one of the constraints to adequate provision of public services in Section 4.9 (Public Services) of the DEIR.

Response to Comment #218-86:
Comment noted. See response to comment #218-85. The comment provides an insightful perspective on the difficulties of financing long term maintenance and operation of public facilities, and explains in part why the upgrade or expansion of older sewer systems in the west County is so problematic.

Response to Comment #218-87:
See response to comment #218-86.

Response to Comment #218-88:
Comment noted. See response to comment #218-28.

Response to Comment #218-89:
Comment noted and has been provided to the decision making bodies for consideration.

Response to Comment #218-90:
Comment noted and has been provided to the decision making bodies for consideration.

Response to Comment #218-91:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The policy reference in the comment (WR-1k) has been renumbered to WR-1l. The policy, as well as Policy WR-1m, does not limit the types of wastewater systems that could be used to address water quality problems in areas where septic systems are failing. The choice as to the appropriate system would be made at a later date in conjunction with the affected provider and community.

Response to Comment #218-92:
See Master Response B (Jurisdiction) and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-93:
Comment noted. The comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR.

Response to Comment #218-94:
There are many compounds that occur in wastewater, including some compounds for which the longevity, mobility, and effects on aquatic organisms (and public health) at very low levels is currently not well

known. Regulation of water recycling and re-use is primarily the responsibility of the Regional Water Quality Control Board and the California Department of Health. Draft GP 2020 land uses and development will rely upon these trustee agencies to establish appropriate wastewater disposal standards with which the wastewater system providers and the County must comply. See also response to comment #14-02.

Response to Comment #218-95:
See response to comment #218-94. Should the referenced study or other studies result in revised wastewater standards, these standards would then have to be met by the discharging entity.

Response to Comment #218-96:
Raising existing structures or requiring new development to be elevated above the 100 year flood elevation has been determined by the County, FEMA, and OES to be the most effective flood mitigation for the lower Russian River area. Requiring new residential construction to be elevated or facilitating elevations of existing structures is more cost effective and feasible than purchasing homes and property to demolish structures in the flood plain. With respect to new development, existing County regulations prohibit new residential uses in the floodway. FEMA mapping does not demark a "10 year" flood plain. With respect to projection of 998 units for the area, the Draft GP 2020 projection of 998 units applies to the entire Russian River Planning area, not just the area subject to flooding. Policy PS-2d (2) includes acquisition of properties in flood hazard areas as a component of planning to reduce repetitive flood losses in the Russian River basin.

Response to Comment #218-97:
Comment noted. Impact #4.5-10 of the DEIR finds that the placement of housing and structures in the 100 year flood hazard areas would be a less than significant impact with the continuing implementation of the existing regulations and Draft GP 2020 policies requiring flood elevation, flood proofing, etc. Draft GP 2020 policies also prohibit new development in the designated floodway and only allow new development in the flood plain. While it is true that the potential impacts are greater in the areas that flood more frequently or at greater depth, a strict prohibition may unduly abridge property rights of many owners of existing lots. In addition, unincorporated urban areas such as Guerneville and Monte Rio cannot simply be moved or prohibited from all development given their status as longstanding and viable communities. Existing regulations and Draft GP 2020 policies instead establish development standards that require elevated construction and flood proofing to reduce potential impacts to acceptable levels.

The home elevations carried out to date have performed well when put to the test in the past floods and are accepted as an effective mitigation by FEMA and OES. Such standards are more effective than buyout. Therefore, the DEIR conclusion that the home elevation standards plus the other policies in Draft GP 2020 adequately reduce the impacts to a less than significant level is appropriate.

Response to Comment #218-98:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #218-99:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. Acquisition of properties in flood hazard areas is included in Policy PS-2d. Encouraging wider compliance with flood insurance requirements and providing more verification was in fact a mitigation that the Board of Supervisors adopted in the Sonoma County Hazard Mitigation Plan, which has been incorporated by reference into the Draft GP 2020 Public Safety Element.

Response to Comment #218-100:
See response to comments #7-05 and #218-56.

Response to Comment #218-101:
The suggestion that storm water retention techniques be recognized as a way to reduce downstream

flood flows is included in the Draft GP 2020 Public Safety Element Policy PS-2e and in the Water Resources Element Policies WR-1a, WR-1b, and WR-1c.

Response to Comment #218-102:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The 100 year flood plain is used across the country by all jurisdictions for planning purposes. It has its genesis in the National Flood Insurance Program and FEMA. The County has made no decision to turn the Russian River County Sanitation District into a regional system. In fact, this system is under the jurisdiction of the Russian River County Sanitation District and not the County of Sonoma. Consolidation of several west county systems is one of several options that are being considered and discussed in proceedings apart from the Draft GP 2020. Table LU-5 estimated that there will be 998 new residential units in the Russian River Planning Area between 2000 and 2020. The Russian River Planning Area takes in a much larger area than the flood plain along the Russian River, extending to Graton, Forestville, Camp Meeker and Cazadero, and Westside and Laguna Roads.

Response to Comment #218-103:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The current FIRM maps represent the best available information and the most accurate mapping of flood hazards. The FEMA maps are being updated and digitized to incorporate changes noted from past flood elevation determinations and to remove distortions by conforming them to a rectified aerial photo base. As these maps are updated in the future, County regulation of development in flood hazard areas will reflect the new information.

The Draft GP 2020 policies for geologic hazards are set forth in Section 2.3 of the Public Safety Element. New development on hillside lots surrounding the river area is restricted by County Codes which may require geologic and/or soils investigations, foundation designs, road requirements, and/or slope controls. New hillside development is often limited by inability to meet water or septic requirements. However, existing structures built under older, less effective Code requirements, may continue to be prone to failure.

Response to Comment #218-104:
The comment pertains to a policy issue and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #218-105:
See response to comment #218-96. Existing FEMA and County regulations do treat areas of intense flooding (floodways) differently than areas of less intense flooding (flood plains). Whether or not FEMA will shift to 200 year flood mapping and what policies might result from such a shift are unknown at this time.

Response to Comment #218-106:
Policy WR-1w was not proposed as part of the Public Hearing Draft GP 2020. Rather it was a new policy that was suggested for adoption in the DEIR as Mitigation Measure #4.5-8. The referenced text of the DEIR on page #4.5-66 has been modified to read:

> "Significance After Mitigation **Addition** ~~Revision~~ of Policy…"

This recommended policy has been added to the Draft GP 2020 Public Safety Element as Policy WR-1v.

Response to Comment #218-107 through #218-137:
These comments pertain to a project proposed by the Sonoma County Water Agency in 2005. The impacts of such projects are addressed in the DEIR, but at a level of detail appropriate for a Program EIR. See also Master Response C (Program EIR/Level of Detail) and Master Response Q (SCWA Water Project).

Response to Comment #218-138:

The 2005 Urban Water Management Plan for the wholesale water supply of the SCWA was approved in December, 2006. As noted in Master Response P (Urban Water Management Plans), the referenced section has been updated to reflect the most current information. The updated information does not result in any changes in the conclusions of the DEIR.

Response to Comment #218-139:
The referenced Exhibit has been replaced with an updated Exhibit based upon the 2005 Urban Water Management Plan, approved in December 2006. See also response to comment #237-92 and Master Response P (Urban Water Management Plans).

Response to Comment #218-140:
See Master Response Q (SCWA Water Project).

Response to Comment #218-141:
See Master Response Q (SCWA Water Project).

Response to Comment #218-142:
The DEIR mentions the Endangered Species Act by reference to Section 4.6 (Biological Resources). However, additional reference is added to the Clean Water Act on page #4.9-21 as follows:

> "The federal government…boundaries (see Section 4.5 (Hydrology and Water Resources) and Section 4.6 (Biological Resources) for discussion of the Federal Clean Water Act)."

Response to Comment #218-143:
Contrary to the comment, the DEIR identifies a significant, unavoidable impact with respect to future water supplies for those jurisdictions that must rely upon increased diversions from the Russian River system due to the uncertainty regarding future State approval of the increased diversions. The impacts of Draft GP 2020 land uses and development on biological resources are discussed in Section 4.6 (Biological Resources). See also Master Response P (Urban Water Management Plans), Master Response Q (SCWA Water Project), Master Response C (Program EIR/Level of Detail), and Master Response S (Water Supply).

Response to Comment #218-144:
Contrary to the comment, the two sections are consistent. The first 21 pages of this section describe the environmental setting regarding water supplies. On the other hand, page #4.9-22 identifies the impact of Draft GP 2020 on water supplies for the urban areas. See also Master Response P (Urban Water Management Plans).

Response to Comment #218-145:
Exhibit #4.9-4 shows Sonoma County water use only, which does not include water serving districts in Marin County. See also Master Response P (Urban Water Management Plans). Water use figures for the other urban areas are shown in Exhibit #4.9-5. However, there are many other water suppliers in the County for which data are not readily available from the suppliers.

Response to Comment #218-146:
This section describes factors affecting water supply for all water providers in general, regardless of whether the Russian River is the source of water. See Master Response S (Water Supply).

Response to Comment #218-147:
Data showing actual water use over a five year period for major water suppliers in Sonoma County, including many of the contractors for the Russian River System water, are shown in Exhibit #4-9.5. One of the potential water savings is in better-controlled landscape and turf irrigation. This can be accomplished through regulation for new development and by an incentives program for existing landscaped areas. Draft GP 2020 includes Policies WR-4b, WR-4d, WR-4e, WR-4f, WR-4g, and others that would place increased emphasis on water conservation in landscaping.

Response to Comment #218-148:
This section simply describes the potential for water recycling and water re-use. The comment is correct that use of recycled water may have water quality implications. The DEIR addresses water quality impacts from the reuse of treated wastewater in Section 4.5 (Hydrology and Water Resources); specifically, Impact #4.5-4on page #4.5-49 acknowledges that depending on the extent of treatment applied to the wastewater, overapplication in agricultural and landscaping uses can result in excessive runoff that enters waterways. The Draft GP 2020 includes Policy WR-4j that provides that water quality of reused or recycled water be of appropriate quality and quantity for the intended use. In addition, the text on Page #4.5-49 is revised as follows:

> "Water quality could also be affected…. Depending on the extent of treatment that is applied to wastewater, overapplication can result in excessive runoff that enters waterways, **particularly during summer low flow periods**."

Response to Comment #218-149:
According to the District (personal communication from Ray Lunardi, President), the Occidental Community Services District, which replaced the Occidental Water Company, has reached agreement with the Sonoma County Water Agency for water through diversion from the Russian River that will supplement its existing water supply. This additional water will result in sufficient supplies for the District to serve the Draft GP 2020 planned growth in the Occidental Urban Service Area, thereby resolving the "significant concern" that was identified in Section 4.9 (Public Services) of the DEIR. In addition, the District has recently completed a major upgrade of its infrastructure.

As a result of the above, Exhibit #4.9-8 is revised to indicate that the water supply for the Occidental Urban Service Area is "adequate" rather than "significant concerns". See response to comment #7-38.

In addition, the first paragraph of page #4.9-25 is revised as follows:

> "The Occidental USA is served by the Occidental **Community Services District** ~~Water Company~~. The Occidental Community Services District has recently completed a major upgrade of its supply infrastructure and increased its available water supplies in the future. As a result, there currently is ~~not~~ an adequate supply for ~~fire flow and very little capacity for new hook ups. The major problem appears to be infrastructure, not available water supply.~~ future land uses and development consistent with Draft GP 2020 ~~could not be served by the existing infrastructure."~~

In addition, Draft GP 2020 Public Facilities and Services Element Policy PF-1c is amended to read as follows:

> "PF-1c: Give the highest priority for water and sewer improvement planning to those service providers whose capacity for accommodating future growth is most limited. These include the ~~Occidental Water Company~~ and Occidental County Sanitation District, the Geyserville Water Works and …."

Response to Comment #218-150:
The DEIR acknowledges in Exhibit #4.9-8 "significant concerns" regarding the capacity of the Sweetwater Springs Water District to serve projected future growth through increased water supplies or conservation, or a combination of both. The DEIR does not specifically mention the other two communities, Rio Nido and Guerneville. However, these communities are located in the Russian River Urban Service Area, which is referenced in the text on Page #4.9-25.

Response to Comment #218-151:
The Russian River Urban Service Area (USA) encompasses the Russian River County Sanitation District (RRCSD) as well as surrounding properties that are eligible to annex to the District under the Draft GP 2020. District boundaries indicate properties that are currently served, as opposed to Urban Service Areas that indicate properties that are eligible to be served under Draft GP 2020. The Russian River USA is also served by several water providers, such as the Sweetwater Springs Water District and the

Armstrong Valley Water District. Some of these districts also serve land outside the USA. It is quite common in Sonoma County for water districts and sewer districts to serve different areas. However, the statement in the text that the Russian River Urban Service Area is served by Sweetwater Springs Water District (SSWD) is correct. As noted in the referenced section of the DEIR, the SSWD may not be able to serve projected future growth within its service area unless it finds additional water suppliers or increases conservation or both.

Page #4.9-25 of Section 4.9 (Public Services) of the DEIR is revised as follows:

> "The Russian River USA and the community of Monte Rio are served by the Sweetwater Springs Water District. **A portion of the Russian River USA along Armstrong Woods Road is served by the Armstrong Valley Water District, a private system operated by California Water Service Company**. The **Sweetwater Springs Water** District currently receives…"

Response to Comment #218-152:
See Master Response B (Jurisdiction) and Master Response D (Effectiveness of Mitigation Measures). Since the sewer and water suppliers in the unincorporated area are special districts, and not under the jurisdiction of the County of Sonoma, the use of policy language emphasizing cooperation, encouragement, and support are the only effective policies available to GP 2020 to accomplish the stated objectives. Sonoma County and the applicable districts need to work together to assure that future service is available when development applications are submitted and reviewed.

Response to Comment #218-153:
The comment is correct that conservation is necessary and desirable for both water supply and wastewater service, and the Draft GP 2020 Water Resources Element contains policies that support more aggressive water conservation. However, it is not likely to be enough by itself. Some additional water supplies will be needed based upon the general plans of the affected jurisdictions. However, as noted above, decisions regarding the conservation policies of the water and sewer providers are made by special districts not under the jurisdiction of the County of Sonoma.

Response to Comment #218-154:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #218-155:
The comment is correct with respect to the name of the entity being the Occidental Community Services District and Policy PF-1c has been corrected accordingly. See also response to comment #7-38. With respect to the Russian River County Sanitation District, the District is embarked upon a proposed expansion of its disposal system. The District's treatment capacity is adequate and is not being expanded. Section 4.9 (Public Services) of the DEIR includes an analysis of the capacity of this system.

Response to Comment #218-156:
This comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The reference has been changed to Policy OSRC-1c in both policies of the Draft GP 2020 Open Space and Resource Conservation Element. This was a typographical error in Draft GP 2020.

Response to Comment #218-157:
Comment noted. See response to comments #235-01 through #235-26. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #218-158:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The policy recommendations have been forwarded to the decision making bodies for their consideration.

Response to Comment #218-159:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of

the DEIR. The policy recommendation has been forwarded to the decision making bodies for their consideration.

Response to Comment #218-160:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for their consideration.

Response to Comment #218-161:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Water Resources Element is an optional element of GP 2020 and is required to be consistent with all other elements. As noted, the primary purpose of the Water Resources Element is to ensure that Sonoma County's water resources are sustained and protected. Many other aspects of water, including reuse and wastewater facilities, are better addressed in the context of other elements. The fact that separate elements address related General Plan topics does not reduce the effectiveness of Draft GP 2020.

Response to Comment #218-162:
Comment noted. There exists "strong public concern" over many areas of the DEIR and Draft GP 2020.

Response to Comment #218-163:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for their consideration.

Response to Comment #218-164:
Comment noted. The background text in Section 2.3 of the Draft GP 2020 Water Resources Element has been modified for clarification. This background text has no bearing on the adequacy of the cumulative impact analysis of the DEIR.

Response to Comment #218-165:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. The text in Section 2.3 of the Water Resources Element has been modified to move the discussion of impairments to Section 3.1. See also Master Response T (Listing of Impaired Water Bodies). This background text has no bearing on the adequacy of the impact analysis of the DEIR.

Response to Comment #218-166:
Comment noted. The Draft GP 2020 does not purport to identify all potential impacts to groundwater. The DEIR analyzes the impacts that could occur with the level of growth and development anticipated under Draft GP 2020, including impacts to water quality from irrigation with treated wastewater.

Response to Comment #218-167:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #218-168:
The comment does not pertain to the adequacy of the DEIR. The background text in Section 3.1 of the Draft GP 2020 Water Resources Element has been modified for clarification. This background text has no bearing on the adequacy of the impact analysis of the DEIR.

Response to Comments #218-169:
See Master Response T (Listing of Impaired Water Bodies). The text in Section 3.1 of the Draft GP 2020 Water Resources Element has been modified for clarification.

Response to Comment #218-170:
The comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. The referenced section is intended to provide examples rather than an exhaustive list. In any event, the text

has been modified such that the listing of each element is unnecessary.

Response to Comment #218-171:
As discussed in the DEIR, part of the reason for the complexity of water supply issues is the variation in water use and supply factors in each urban service area. Contrary to the comment, however, the text under Impact #4.9-1 addresses water supply issues for all urban service areas and water supply entities in the County unincorporated area, not just those few areas that are served by the SCWA. See also Master Response S (Water Supply).

Response to Comment #218-174:
The comment pertains to a policy issue in the Draft GP 2020 and not to the adequacy of the DEIR. See also Master Response B (Jurisdiction).

Response to Comment #218-175:
Comment noted. See also Master Response B (Jurisdiction) and Master Response P (Urban Water Management Plans).

Response to Comment #218-176:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. See also Master Response B (Jurisdiction), Master Response D (Effectiveness of Mitigation Measures), and response to comment #7-02.

Response to Comment #218-177:
The comment regarding further mitigation appears to refer to Impact #4.9-1 regarding the adequacy of water supplies to meet future urban growth and the extent to which conservation measures have been or will be effective in meeting future demand. However, as noted in Master Response B (Jurisdiction), the County does not have jurisdiction over public water suppliers and must work with these suppliers on a cooperative basis in order to initiate or expand water conservation programs that are implemented by the suppliers. Since Draft GP 2020 and the DEIR include policies that promote cooperative efforts to conserve, the offered mitigation represents the best possible measure to reduce these impacts.

However, the County does have jurisdiction over land use. Draft GP 2020 includes policies in Section 3.4 of the Water Resources Element to reduce water demand that can be implemented through the permit review process, such as low flow toilets, use of drought tolerant plants, etc. See also response to comment #7-02.

Response to Comment #218-179:
The information presented in the DEIR regarding the capacity of the Russian River County Sanitation District (RRCSD) represents the existing conditions known at the time the DEIR was prepared. The information was provided by the RRCSD at the request of Sonoma County PRMD. In spite of the variation in flow in this District as cited by the comment, the capacity status reported in the DEIR remains accurate, as improvements needed to address capacity issues are not resolved. See also response to comment #218-43.

Response to Comment #218-180:
Comment noted. See response to comment #218-179

Response to Comment #218-181:
These numbers are estimates from technical staff in PRMD. There are no firm data available as to the exact number of septic systems. Average household size varies throughout the County and can range from slightly more than two per household to much higher. Household size statistics are included in the US Census. See also response to comment #218-15.

Response to Comment #218-182:
The DEIR, including Section 4.9 (Public Services), was prepared by a team of consultants in collaboration with Sonoma County PRMD. The authors are listed in Section 7.1 Report Preparers.

Response to Comment #218-183:
The figures in the DEIR are taken from the County PRMD staff reports for the Monte Rio Wastewater Project on file at PRMD offices.

Response to Comment #218-184:
An analysis of the capacity of the sewer districts to serve growth was performed for each of the Urban Service Areas. For the Russian River Urban Service Area, the analysis showed that the Russian River County Sanitation District would have sufficient treatment capacity to serve projected growth and buildout, but the system needs to expand its disposal capacity. The DEIR discusses this issue in Section 4.9 (Public Services) on Page #4.9-40 and Exhibits #4.9-8 and #4.9-10. PRMD's capacity studies are referenced in the DEIR.

Response to Comment #218-185:
Most sanitation districts serving unincorporated Sonoma County are managed by special districts created under state legislation. Some have the same members of the Board of Supervisors sitting as the Directors of the district and some do not, but most are not under County jurisdiction.

Response to Comment #218-186:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 Open Space and Resource Conservation Element includes policies in Section 3.2 of the Open Space and Resource Conservation Element that substantially increase riparian corridor protection in the unincorporated area.

Response to Comment #218-187:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Redwood trees are protected by the existing County Tree Protection Standards set forth in the Zoning Code.

Response to Comment #218-188:
Comment noted.

Response to Comment #218-189:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #218-190:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. Policy PS-1a calls for the County to utilize whatever data on geologic hazards and risks becomes available. Such information will help facilitate more informed decision making during project review and consideration to achieve the stated goal of preventing exposure of people and property to risks of damage or injury from earthquakes, landslides, and other geologic hazards.

Response to Comment #218-191:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. See also response to comment #218-190.

Response to Comment #218-192:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR, and has been forwarded to the decision making bodies for consideration. The policy refers to future amendments to incorporate new data as it becomes available.

Response to Comment #218-193: The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #218-194:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. However, it should be noted that the Geologic Hazard Zone implemented as a result of Policy PS-1e refers to those earthquake fault zones identified by the Alquist Priolo Act and would have no bearing on development in Rio Nido.

Response to Comment #218-195:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been noted and forwarded to the decision making bodies for consideration. Landslide risks related to new development are reduced through project review and Code requirements for geologic analysis of proposed building sites.

Response to Comment #218-196:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #218-197:
See response to comment #218-97.

Response to Comment #218-198:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #218-199:
See responses to comments #218-99 through 218-101.

Response to Comment #218-200:
See Master Response J (Buildout). The effective limit on development that requires public services occurs when the service provider informs the County that it does not have the capacity to serve a proposed project or future projects. The Draft GP 2020 Land Use Element includes Goal LU-4, Objectives LU-4.1 through LU-4.4, and Policies LU-4a through LU-4e, among others, that address the phasing of growth with the availability of services.

Response to Comment #218-201:
See Master Response E (Extent of Significant Impacts).

Response to Comment #218-202:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-203:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-204:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-205:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the adequacy of the DEIR. However, contrary to the comment, the Draft Public Facilities and Services Element includes a brief discussion of this issue under Section 2.2 Sewer Services.

Response to Comment #218-206:
The impacts of Draft GP 2020 on endangered species, including endangered fish species, are addressed

in the Open Space and Resource Conservation Element of the Draft GP 2020 and analyzed in Section 4.6 (Biological Resources) of the DEIR. Beneficial uses are defined in the Basin Plans of the applicable Regional Water Quality Control Boards. The level of mitigation credited for future programs in Draft GP 2020, particularly those that are not yet funded, is relatively low due to the uncertainty of the programs being completed. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-207:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. See Master Response P (Urban Water Management Plans).

Response to Comment #218-208:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Sonoma County Agricultural Commissioner's Office administers the Sonoma County Vineyard Erosion and Sediment Control Ordinance (VESCO). Growers planting new vineyards or replanting existing vineyards are required to utilize recognized conservation practices, best management practices and provide for riparian setback to protect the environment and reduce siltation from hillside vineyards. As noted in response to comment #262-34, the monitoring of erosion control measures is carried out by the Agricultural Commissioner's office and are generally thought to be effective. As noted in response to comment #6-08, vineyards on slopes in the 35% - 50% range are recommended for additional BMPs and technical assistance to improve effectiveness. As a result, Draft GP 2020 includes Policy WR-1j.

Response to Comment #218-209:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #218-210:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #218-211:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. See response to comment #218-43.

Response to Comment #218-212:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. See Master Response T (Listing of Impaired Water Bodies) and response to comment #218-179.

Response to Comment #218-213:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. The comment appears to summarize earlier comments in Letter #218. See responses to those earlier comments.

Response to Comment #218-214:
Comment noted. This comment has been provided to the decision making bodies for consideration. See Master Response G (Recirculation).

Response to Comment #219-01:
Comment noted. The only available population figures for the years between the decennial census are estimates from the State Department of Finance. Unfortunately, the methodology for these estimates are different than the methodology that is used for the census and the estimates are not generally considered as accurate as the census.

Response to Comment #219-02:
The statement under the Areas of Controversy (page #2.0-3) represents the controversy surrounding the conversion of agricultural land. The conversion of agricultural land and timberland to other uses is discussed in Section 4.8 (Agricultural and Timber Resources) of the DIER.

Response to Comment #219-03:
Comment noted. The comment accurately portrays the referenced Section 3.2 (Project Objectives and History) of the DEIR.

Response to Comment # 219-04:
The categories and percentages are provided through the State Department of Conservation's Farmland Mapping and Monitoring Program and are not available in any other categories. In its background studies for the recently adopted timberland conversion ordinance, County staff estimated that there were about 230,000 acres of commercial timberland in the County, which would be about 25% of the entire County.

Response to Comment #219-05:
The comment is correct; the acreage of the incorporated cities (44,237 acres) represents about 4.3% of the total number of acres in Sonoma County. The text on page #4.1-3 of the DEIR is revised as follows:

> "Public lands are six percent, or 55,723 acres, while incorporated cities are 44,237 acres, or ~~three percent~~ **approximately four percent** of total county acres."

Response to Comment #219-06:
The difference is likely due to the differing sources of data. With the increasing availability of GIS technology, such differences are relatively commonplace among various jurisdictions and mapping systems. Generally speaking, the County is slightly over 1 million acres.

Response to Comment #219-07:
The information in Section 4.1 (Land Use, Population, and Housing) is meant to provide only a general comparison for counties throughout California. Impact #4.1-1 (Growth and Concentration of Population) analyzes the effect of the Draft GP 2020 in the unincorporated area with respect to population density. Further analyzing the population density of surrounding counties is beyond the scope of this DEIR.

Response to Comment #219-08:
The projected year 2020 residential unit total is based upon the assumption that the cities will annex all lands within the Draft GP 2020 designated Urban Service Areas. As a result, the figures reflect the loss of existing units that are currently located in the unincorporated area to City annexation over the life of the General Plan.

Square footage totals for agricultural processing uses in Exhibit #4.1-4 in year 2000 include a total of 10,125,000 square feet. This estimate is based upon calculations of winery size in relation to case production by PRMD staff in consultation with local architects familiar with winery design and construction. The total was developed using an annual case production of 17,400,500 for that year. This latter figure was derived from research published by Savor Magazine in its Fall 2002 edition, supplemented by staff research. The projected winery square footage in Exhibit #4.1-1 for 2020 was estimated at 19,102,600 square feet. This estimate was calculated based upon the projected increase in wine grape production developed in consultation with the Sonoma County Grape Growers Association and the Agricultural Commissioners Office. It assumes the same size factors and importation rate used in the year 2000 estimate. The details of the methodology are available in PRMD files.

Response to Comment #219-09:
Impact #4.1-3 is focused on rural areas due to the increased presence of such uses as agricultural processing and visitor serving uses that may conflict with agricultural production or with other non residential uses in rural areas. Draft GP 2020 includes no policies or programs that suggest that all future complaints must be eliminated or prevented. In fact, the Draft GP 2020 reliance upon an agricultural economy acknowledges that such complaints are unavoidable to some degree. That is why, for instance,

that the County has a "Right-to-Farm" Policy and Ordinance. Nonetheless, the language on page #4.1-41 is revised as follows in order to clarify that the impact is based upon the conflicts of land uses rather than the number of complaints:

> "Implementation of the above policies and mitigation measures would reduce land use conflicts, but would not ~~fully prevent future complaints~~ **avoid all future conflicts among incompatible land uses** in rural areas. Therefore, this would be a significant impact."

Response to Comment #219-10:
The comment is correct that an incorrect assumption was made in the DEIR that winery expansion contributed in some way to elevated pathogen levels in Sonoma Creek. The DEIR was prepared before the Sonoma Creek 303(d) TMDL study was completed in 2005, which did not identify wineries as a contributor to this problem.

Based upon the above, the following paragraphs on pages #4.5-13 and #4.5-14 in Section 4.5 (Hydrology and Water Resources) are revised as follows:

> "The San Francisco Bay Regional Water Quality Control Board has classified the Sonoma Creek watershed as an impaired water body due to sedimentation, nutrients, and pathogens. The development of vineyards on steep hillsides, especially in the 1980s and early 1990s before the County developed vineyard erosion control regulations, has been attributed to be one of the major causes of sedimentation. This and other related watershed management issues were evaluated and addressed in the Sonoma Creek Watershed Management Plan, with implementation currently underway by the Southern Sonoma Resource Conservation District (RCD) and the Sonoma Ecology Center through educational and outreach programs with stakeholder groups, including the Sonoma Valley Vintners and Grower's Alliance.
>
> ~~The expansion of wineries and resultant wastewater management issues and the limitations in wastewater treatment plant capacity may be responsible for elevated pathogen levels within the watershed, as unlike the adjacent Petaluma River watershed, there are few dairies in this watershed.~~ Other watershed management issues include flooding, streambank erosion, riparian and fisheries habitat enhancement, and the effect of water diversions and groundwater pumping for vineyard irrigation on summer flow in creeks."

Response to Comment #219-11:
Comment noted. However, the two statements are not contradictory. Available data, such as that contained in the Kleinfelder Report and the Canon Manor West Assessment District EIR, show some groundwater levels in the County have dropped over time. However, as noted in those reports, that does not necessarily mean that the data are sufficient to determine the precise nature of groundwater conditions in all areas.

Response to Comment #219-12:
Agriculture was not singled out because it is potentially a more significant source of sediment than timber harvesting or surface mining, although it probably contributes more sediment than either of these due to the extent of agricultural use in the County. However, Policy WR-1i, derived from Mitigation Measure #4.-3(a), has been modified to develop erosion and sediment controls for orchards that is similar to that which is in place for vineyards due to the fact that orchards involve similar levels of soil disturbance. Timber harvesting is already regulated by the Department of Forestry, and surface mining is addressed by both State and County regulations, including CEQA review.

The acreage of slopes in the County that exceed 35% is unknown. See also response to comment #6-08.

The title of Exhibit #4.5-7 is revised as follows:

> "Exhibit 4.5-7 Projected Agricultural Cultivation **2002-2020"**

In addition, the sentence following Exhibit #4.5-8 is revised as follows:

> "The Board of Supervisors recently directed that a new grading ordinance be prepared…from ~~all~~ agricultural cultivation **such as orchards** that could result in significant sedimentation."

Response to Comment #219-13:
Conducting hydro-geologic studies, including pump tests where potential well interference is a concern, is a common approach and is often completed for commercial and municipal wells. Although completion of pump tests adds to the cost of well development, considering the potential impacts to adjacent wells, it is an appropriate mitigation measure and policy recommendation. Notwithstanding that, Draft GP 2020 Water Resources Element Policy WR-2c has been revised to remove the specific detailed requirements of the new well permit standards, while retaining the basic policy direction to establish standards as part of code changes to address potential well interference.

Response to Comment #219-14:
Exhibit #4.6-2 of the DEIR shows the location of known or suspected streams with listed fishery resources. Information from NOAA Fisheries available at the time of the mapping was considered in identifying anadromous streams, but identification was also based on input from the CDFG, County records, and other information sources used by the Sonoma County Agricultural Preservation and Open Space District during preparation of "Acquisition Plan 2000". Where mapped, the critical habitat designations by NOAA Fisheries tend to be more broadly based than those shown in Exhibit #4.6-2, and often encompass entire watersheds suspected to support habitat for listed fish species, even when field conditions may in fact preclude the potential for anadromous species. Policy OSRC-7i calls for a comprehensive habitat identification and mapping program for use in future policy considerations, which would include an update of mapping for anadromous fishery resources. Policy OSRC-7e calls for regular review of Biotic Habitat Areas, ensuring that the latest information is available as part of resource planning.

Response to Comment #219-15:
Comment noted. The comment appears to be referring to a generalized statement of wetlands in the county in the second paragraph under the Wetlands subsection on page #4.6-18 of the DEIR rather than the discussion under Sensitive Natural Communities. The reference in question was not intended as a "definition" for wetlands, but an indication of the various types of habitat known to contain wetlands. As acknowledged on page #4.6-18 of the DEIR, definitions of wetlands vary. In riparian habitat, the limits of jurisdiction would depend on the particular agency and site specific conditions. The U.S. Army Corps of Engineers' jurisdiction along most waterways is generally defined by the Ordinary High Water Mark, while the California Department of Fish and Game's jurisdiction typically extends to the top of the bank. The Regulatory Setting discussion on pages #4.6-20 through #4.6-25 of the DEIR provides additional information on the role of the various agencies in regulating sensitive biological resources, with wetlands discussed on pages #4.6-24 and #4.6-25.

Response to Comment #219-16:
Comment noted. While the comment may be correct that the Agricultural Commissioner's annual report included an 8,000 acre adjustment in grape acreage, the data in Exhibit #4.8-3 came from the Sonoma County Grape Grower's Association. As noted on page #4.8-18 of the DEIR, estimates of acreage for agricultural uses are sometimes adjusted as refinements / improvements in technology (e.g., geographical information systems and aerial maps) generate more accurate data.

Response to Comment #219-17:
The referenced section describes the basic requirements of the VESCO ordinance. Section 4.5 (Hydrology and Water Resources) of the DEIR describes the projected number of acres of agricultural cultivation (primarily of vineyards) through 2020 in Exhibit #4.5-7. The discussion under Impact #4.5-3 notes that such development could be a significant source of soil erosion and sedimentation of downstream waterways, especially if they occurred on steep slopes (page #4.5-45). This section describes VESCO's three levels of planning and requirements for increasing degree of slope and that

vineyard development would generally be precluded on slopes greater than 50 percent.

The DEIR does not assume that the VESCO does not adequately mitigate the environmental effects of vineyard development. However, the DEIR notes that VESCO does not pertain to the planting of other crops such as orchard on steep slopes. The DEIR recommends mitigation to establish Best Management Practices (BMPs) and technical assistance to reduce erosion and sedimentation for all agricultural cultivation (i.e., both vineyards and row crops) for agricultural cultivation on slopes greater than 35% to further reduce impacts to downstream waterways. It should be noted that Mitigation Measures #4.5-3 (a) and #4.5-3 (b) have been revised as described in response to comment #219-12. See also response to comment #6-08.

Response to Comment #219-18:
The comment refers to the loss of agricultural potential on lands protected by riparian corridor and biotic habitat designations. As noted in the DEIR, the acreage of potential agricultural land within stream conservation areas is mostly land that is lost to future agricultural production rather than land that is converted from agricultural use to a non-agricultural use. A more accurate analogy would be to urban land that is lost to parks. As far as the extent of land available to agriculture, it has been shown over time that lands thought to be infeasible for agriculture can actually turn out to be productive. As noted in the DEIR, the Draft GP 2020 designates over 800,000 acres of land in land use categories that accommodate agricultural production.

Response to Comment #219-19:
The comment is correct in that the reported agricultural crop production acreage did not reflect all cropland in the county. The estimates of agricultural water usage were derived from information obtained from DWR, which provided data for irrigated cropland only, excluding non-irrigated crop such as dry farmed hay production. The DEIR is revised below to clarify this.

According to the 2002 Sonoma County Agricultural Crop Report, there are approximately 84,000 total acres in agricultural crop production (please refer to the following table), including field crops:

Crop	**Acreage**
Fruit and Nut (excl. wine)	3,592
Wine	59,891
Vegetable Crop	562
Irrigated Pasture	10,563
Field Crop (hay, etc.)	9,350
Total	83,958

Excluding field crops, this equates to approximately 73,000 acres of irrigated cropland, which is comparable to the DWR-derived estimate of 72,000 acres in 2002. Based on updated DWR data for 1998 through 2002, annual applied water use for vineyards has ranged from 0.61 to 0.89 acre-feet per acre, which results in lower annual water use estimates than originally provided in Exhibit #4.9-10.

Based on the above, the paragraphs in Section 4.9 (Public Services) are revised as follows:

> "With approximately ~~60,000~~ **84,000** acres, or ~~six~~ **8.5** percent of the county, in agricultural crop production, Sonoma County agriculture is a significant producer. However, most of the agricultural land in the county is used for dry farmed hay production or for grazing, and is not irrigated. Although some of the vineyards and orchards along the Russian River and Sonoma Creek are irrigated by surface diversions under riparian water rights, (with many vineyards served by small surface diversions and storage facilities), most vineyard acreage is irrigated at least partially by groundwater

wells.

Estimates of agricultural water use can be derived from an inventory of crop acreage and the annual water demand of the crop, which varies widely by crop type. The water requirement of a crop is directly related to the water lost through evapotranspiration (ET). In turn, the amount of water that can be consumed through ET depends in the short-term on local weather conditions, such as temperature and humidity, and in the long-term on seasonal climatic conditions, such as rainfall totals and soil moisture storage. The ~~Draft Update of the~~ **California** Department of Water Resources (DWR) ~~Bulletin 113, Crop Water Use in California, includes~~ **provides** agricultural water-use estimates for Sonoma County. According to the ~~report~~ DWR, approximately ~~105,900~~ **92,000** acre-feet of water was used for agricultural irrigation in ~~2001~~ **2002**, the latest date for which information is **readily** available. This ~~report~~ indicates agricultural water use is up about ~~25~~ **44** percent from 1998. The fact that ~~2001~~ **2002** was a **somewhat drier than normal** ~~dry~~ year is contributing to this increase. This estimate includes water derived from groundwater wells, surface diversions, and surface impoundments, and represents roughly 50 percent of the total estimated water use in Sonoma County. **Some of the agricultural water use also represents use of treated wastewater, a trend that is increasing and will become more important over time.** Some of the increased water use can likely be attributed to increased vineyard plantings. However, there can also be substantial differences in total agricultural water use over a period of years due to differences in climate (rainfall and summer temperatures). Water use estimates by crop are presented in **Exhibit 4.9-3**."

In addition, Exhibit #4.9-3 is revised as follows:

Exhibit 4.9-3

Agricultural Water Use - Irrigated Crops

Year		**Vineyards**	**Total Irrigated Crops**
1998	Acreage	37,400 acres	51,000 acres
	Applied Water	~~34,100~~ **22,771** acre-feet	~~74,800~~ **63,889** acre-feet
1999	**Acreage**	**54,700 acres**	**65,800 acres**
	Applied Water	**51,767 acre-feet**	**88,371 acre-feet**
2000	Acreage	44,900 acres	~~57,600~~ **57,500** acres
	Applied Water	48,900 35,045 acre-feet	~~92,300~~ **78,737** acre-feet
2001	Acreage	47,300 acres	59,300 acres
	Applied Water	~~55,600~~ **39,134** acre-feet	~~105,900~~ **89,528** acre-feet
2002	**Acreage**	**62,600 acres**	**72,000 acres**
	Applied Water	**55,478 acre-feet**	**92,036 acre-feet**

Source: ~~Questa Engineering communication with Department of Water Resources - Central District, Land and Water Use Conservation Section, February 3, 2003.~~ **Annual Land and Water Use Data, California Department of Water Resources, December 2004-October 2006. Accessed online at** http://www.landwateruse.water.ca.gov/annualdata/datalevels.cfm

In addition, Exhibit #4.9-4 is revised as follows:

Exhibit 4.9-4

Sonoma County Water Use Estimates – 2001

	Water Consumption (acre-feet)	**Percent Consumption**
Sonoma County Water Agency [a]		
SCWA - Water Contractors [b]	44,000	~~24~~ 26
SCWA - Other Users [c]	1,100	1

Agricultural Water Use [d]	~~105,900~~ **89,500**	~~58~~ 54
Residential Wells [e]	32,000	~~17~~ 19
Total	**~~183,000~~ 166,600**	**100**

a. Water consumption estimates do not include SCWA contractors and users outside of Sonoma County (i.e., North Marin Water District and Marin Municipal Water District).

b. SCWA water contractors include the City of Santa Rosa, City of Petaluma, City of Rohnert Park, Valley of the Moon Water District, City of Sonoma, City of Cotati, and **the Town of Windsor** ~~Forestville Water District~~.

c. Other users that the SCWA has the obligation to provide water to include the Town of Windsor and various water companies.

d. Agricultural water use estimates include water derived from both surface and groundwater sources, **with a small component of recycled water.**

e. There are no available well water use estimates for Sonoma County. Therefore, as a rough approximation for comparison purposes, water use estimates assumed that 80 percent of the wells in the county were for residential purposes (80% of 40,000 wells ' 32,000 wells) and that each of these wells uses an average of 1 acre-foot per year. It was assumed that most of the remaining 8,000 wells in the county are used for agricultural purposes, accounted for under the agricultural water use estimates.

Sources: Urban Water Management Plan, SCWA, 2000; and Crop Water Use in California, Draft Bulletin 113, Department of Water Resources.

In addition, the following sentences are revised as follows:

> "The great majority of future agricultural growth is expected to occur in unincorporated areas of the county. According to Exhibit #4.5-7, vineyard acreages are projected to increase by approximately 15,900 acres between 2002 and 2020. Given that the current annual grape irrigation is approximately ~~1.0~~ **0.9** acre-~~foot~~ **feet** of water per acre, this represents roughly ~~15,900~~ **14,300** acre-feet of increased water demand for grape irrigation alone."

Response to Comment #219-20:
The comment refers to the discussion of the loss of agricultural land under the Mitigated Alternative to future processing and support uses. The conclusion of the analysis under Impact #4.8-2 is that the loss of agricultural land to these uses would be less than that which would result from the Draft GP 2020. The basis for this conclusion is that the agricultural production would be reduced by additional restrictions protecting biological, water, and other resources. Reduced production would likely reduce the demand for processing and support uses. The requirement for 75% of the crop to be locally grown could also reduce processing and support facilities as a consequence of lower levels of importation. Less processing and support uses would likely reduce the loss of agricultural land under this alternative.

Response to Comment #219-21:
Comment noted. However, Section 5.0 (Alternatives) presents three alternatives to the Draft GP 2020 policies that capture a range of feasible policy options. The impact analysis in the Section, although at a general level of detail appropriate for a countywide General Plan, provides the County decision makers with information about the impacts of these policy options. See Master Response H (Range of Alternatives).

Response to Comment #219-22:
Comment noted. The DEIR provides a range of reasonable alternative policy options for consideration by the County decisionmakers in deciding whether to approve or modify the Draft GP 2020. The Board of Supervisors will make findings regarding the infeasibility of alternatives and mitigation measures at the time it decides to approve the plan, as required by CEQA. See also Master Response H (Range of Alternatives).

Response to Comment #220-01:
Draft GP 2020 Agricultural Resources Element Policies AR-6d, AR-6e, and AR-6f provide limits on visitor serving uses on agricultural lands and require these uses to be compatible with and secondary and

incidental to agricultural production activities. The impacts of agricultural tourism on agricultural and timber resources are addressed in Section 4.8 (Agricultural and Timber resources) of the DEIR. See also Master Response K (Agricultural Traffic).

Response to Comment #220-02:
See Master Response K (Agricultural Traffic). With respect to clustering of agricultural tourism uses, see response to comment #237-31 and #237-32. Traffic generated by the River Rock casino is part of existing conditions and not an impact of Draft GP 2020. However, the casino's contribution to baseline and future traffic conditions is included in the traffic model used for Draft GP 2020.

Response to Comment #220-03:
The Draft GP 2020 Circulation and Transit Element does not propose road capacity improvements on rural agricultural roads except where the road serves a regional arterial function, such as River Road. County roads that are anticipated to experience congestion based upon future land uses and development under Draft GP 2020 are shown in Figure CT-3 of the Circulation and Transit Element and in Section 4.2 (Transportation) of the DEIR. See also Master Response K (Agricultural Traffic).

Response to Comment #220-04:
See response to comment #220-03 and Master Response K (Agricultural Traffic).

Response to Comment #220-05:
Section 4.2 (Transportation) of the DEIR considers the traffic impacts of growth in the unincorporated area of Sonoma County as well as projected growth in each of the nine cities as well as in the surrounding counties. Section 6.2 (Cumulative Impacts) of the DEIR identifies cumulative traffic impacts. See also Master Response K (Agricultural Traffic).

Response to Comment #220-06:
The traffic impacts of all land uses and development under Draft GP 2020 are addressed in Section 4.2 (Transportation) of the DEIR, including the uses listed in the comment. These impacts are addressed at a level of detail appropriate for a countywide General Plan. Individual project mitigations would be addressed more specifically as part of the detailed review of the project. See also Master Response C (Program EIR/Level of Detail) and Master Response K (Agricultural Traffic).

Response to Comment #220-07:
See Master Response K (Agricultural Traffic) and Master Response G (Recirculation).

Response to Comment #221-01:
The Draft GP 2020 Air Transportation Element continues the current General Plan's limits on commercial aircraft operations at the Sonoma County Airport. For example, Objective AT-5.2 and Policy AT-5b limit the number of daily departures. Aircraft emissions are addressed in Section 4.3 (Air Quality) of the DEIR under Impact #4.3-5.

Response to Comment #221-02:
Although helicopters are a type of aircraft and can result in loud, short term noise, the County's ability to regulate these flights and the resulting noise is limited by federal and state regulations, particularly where the flights are related to law enforcement and emergency operations. Because of the infrequency of helicopter flights in any one location other than airports or hospitals, the impacts are neither long lasting nor significant. See also response to comment # 224-10.

Response to Comment #221-03:
Mitigation Measure #4.5-5 recommended in the DEIR has been included in Draft GP 2020 for urban areas. The extent of development in rural areas is less dense and not as likely to affect groundwater recharge as the more concentrated development in urban areas. As a result, the requirement for mandatory recharge protection in these rural areas is not likely to be effective in protecting groundwater supplies. In addition, Policy WR-4b calls for a program for increasing groundwater recharge on a countywide basis. Should such a program justify recharge controls in rural areas, it would be supported

by Draft GP 2020.

Response to Comment #221-04:
Comment noted.

Response to Comment #221-05:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Policy PS-3m, now Policy PS-3l, has been modified as recommended in Mitigation Measure #4.9-10 of the DEIR. The details, including possible exemptions, will be established in the future revisions of the Code to implement the policy.

Response to Comment #221-06:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR.
Existing County tree protection regulations and Draft GP 2020 policies and programs provide for protection of trees and habitat in balance with other Draft GP 2020 policies, such as those for affordable housing, agricultural protection, employment, etc.

Response to Comment #221-07:
Comment noted. The County's existing Project Review procedures enable public water suppliers to inform the County, prior to approval of a discretionary project, whether or not water supplies are available to serve the project. In addition, Policy WR-3i supports a moratorium on land use entitlements if it is discovered that water supplies are not available. See also Master Response S (Water Supply).

Response to Comment #222-01:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Policies CT-6i, CT-6j, CT-6k, CT-6p, CT-6q, CT-6t, CT-6v, CT-6aa, CT-6hh, CT-6ii, CT-6jj, CT-6rr, CT-6ss, CT-6tt, CT-6uu, and CT-6vv of the Draft GP 2020 Circulation and Transit Element have been revised to include a provision that the improvements must be consistent with the designated road classifications. The language regarding the "local desires" of the respective community was not included.

Response to Comment #222-02:
Based on the comment, Policy OSRC-16i, is recommended to be revised as follows:

> **"Policy OSRC-16i:** Ensure that any proposed new sources of toxic air contaminants or odors would provide adequate buffers to protect sensitive receptors and comply with ~~existing~~ **applicable** health standards. Promote land use compatibility for new development by using buffering techniques such as landscaping, setbacks, and screening in areas where different land uses abut one another."

Response to Comment #222-03:
The DEIR addresses the noise impacts of Draft GP 2020 related to increased traffic levels in Section 4.4 (Noise) under Impact #4.4-1. In order to minimize the visual impacts related to sound walls along scenic rural roadways, Policy NE-2b (Mitigation Measure #4.4-1) has been modified as follows:

> "NE-2b: **When not in conflict with Scenic Resource policies**, encourage installation of sound barriers, **noise reducing pavement types, or other noise reducing solutions** on roadways in non-industrial urban areas where an exterior noise level of 65 dB Ldn or more is attained and residences or other noise sensitive uses exist. Encourage installation of sound barriers adjacent to roadways in other areas where significant noise sensitive land uses exist."

Response to Comment #222-04:
The DEIR concluded that with the implementation of existing regulations and Draft GP 2020 policies, Impacts #4.5-1, #4.5-2, #4.5-4, and #4.5-6 would be less than significant.

Response to Comment #222-05:
See response to comment #6-08.

Response to Comment #222-06:
The basis for the conclusion that the existing regulations and Draft GP 2020 policies render this impact as less than significant is the fact that wastewater disposal systems fall under the jurisdiction of the applicable Regional Water Quality Control Boards. Should the Boards adopt or impose new controls or standards on pollutants, the systems will be required to comply with these controls.

Response to Comment #222-07:
The reference is to the DEIR proposed policy to require pump tests for high capacity wells. This is a General Plan, which is a statement of policy to govern future regulations; the policy would be implemented with specific details in the County code, following adoption of the GP 2020. Definitions of terms and implementation guidelines and procedures for completing hydro-geologic studies, including performance of pump tests, will be prepared during rule making and County Code and ordinance development and revision.

Response to Comment #222-08:
Comment noted. While the impacts of any flood event can be significant to the people and properties that are in harm's way, the impact discussion addresses the impacts of new development within the flood zone, which would be subject to the policies and regulations described under Impact #4.5-10 and which is limited to only a few areas of the County through the Draft GP 2020 Land Use Plan. These are designed to protect both new structures and existing structures from potential flooding impacts. In addition, structures that are currently located in flood hazard areas are being addressed through a combination of existing programs, such as the Flood Elevation Program in the Guerneville area, new flood control facilities in the Petaluma areas, and new Draft GP 2020 policies in Section 3.2 of the Public safety Element.

Response to Comment #222-09:
Comment noted. The reason for the conclusion is described in the discussion of Impacts #4.8-1, #4.8-2, #4.8-3, and #4.8-4.

Response to Comment #222-10:
The information on existing and projected usage of Sonoma County water outside of Sonoma County is shown in Exhibit #4.9-2 of the DEIR.. See also Master Response S (Water Supply).

Response to Comment #223-01:
Comment noted. See also responses to comments #233-01 through #231-06.

Response to Comment #224-01:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. A proposed Scenic Landscape Unit designation for portions of the Franz Valley area is under consideration in Draft GP 2020, but is not recommended by the Planning Commission due to the minimal development allowed by that Plan that could affect visual resources.

Response to Comment #224-02:
Comment noted.

Response to Comment #224-03:
The Draft GP 2020 Noise Element standards are focused on attaining noise levels at noise-sensitive receivers that are typical of the suburban and semi-rural developed areas of Sonoma County. This is shown by a comparison of the Noise Element performance standards (Table #NE-2) to the ambient noise measurement results shown by Figure #4.4-3 and Exhibits #4.4-4 through #4.4-11 in the DEIR. In general, the goal of the Noise Element is to ensure that new projects do not cause noise levels at sensitive receivers to exceed the noise levels that residents of Sonoma County have come to expect. Subsequent environmental review at the project level would analyze noise impacts in part by comparison to local noise standards and would routinely be applied to proposed new event centers and retail outlets, as these are typically discretionary projects subject to CEQA. However, casinos built by tribes are not subject to the County permitting process or CEQA review. Subsequent project-level environmental

review would also determine impacts by comparing project-related noise levels to existing noise levels, so that a project located in an exceptionally quiet area will be subjected to additional scrutiny. Policy NE-1c(2) requires that the noise standards be reduced by five decibels if noise due to the proposed new use exceeds the ambient noise level by ten or more decibels, providing an additional measure of protection for quiet areas. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #224-04:
Exhibit #4.4-2 shows the location of noise-impacted areas and transportation corridors. A community noise survey was conducted in representative areas of the county and the results are discussed in Section 4.4 (Noise) of the DEIR. All residential uses are identified in the Draft GP 2020 and the DEIR as noise-sensitive. As the unincorporated area of the County of Sonoma contains over 75,000 individual parcels, the majority of which would allow for at least one residential use, it would be impractical to map each and every noise sensitive use. See Master Response C (Program EIR/Level of Detail).

Response to Comment #224-05:
The traffic noise level predictions were made using current and predicted future traffic volumes developed during preparation of Draft GP 2020. Although the FHWA traffic noise model was developed in 1977 and further refined in the 1980s, the inputs (e.g., traffic volume, day / night traffic distribution, truck mix and speed) were current as of the time of EIR preparation. In spite of its vintage, the FHWA traffic noise model remains a valid traffic noise prediction model, proven many times over the years by comparisons made of measured and modeled noise levels as a routine part of traffic noise assessments. The fact that traffic noise levels are predicted to decrease along certain roadway segments is the result of predicted decreases in traffic volumes, likely due to the development of alternative routes, such as Highway 101.

The data presented in Exhibit #4.4-3 represent ambient noise levels at sites that were deliberately selected to represent the noise effects of nearby traffic in a typical back yard or other residential outdoor activity area. Therefore, as a more conservative baseline, the measured noise levels at those sites would not be expected to be as high as the levels predicted within 50 feet of the centerlines of the major roadways in Sonoma County, which are the values presented in Exhibit #7.7-7 in Appendix #7.7 of the DEIR.

Response to Comment #224-06:
The comment is correct that the L_{dn} metric describes an average noise level. As explained on page #4.4-1 of the DEIR, L_{dn} describes the energy-average noise level over a 24-hour period, after weighting nighttime noise levels by ten dB. The use of a day-night average level (or the similar CNEL) to establish the noise contours in the Noise Element for sources such as roads and highways as well as stationary noise sources is required by law (see Govt. Code, § 65302, subd. (f)). As noted on page #4.4-19, the Federal Interagency Committee on Noise found the L_{dn} metric to be reliably correlated with annoyance, making it a useful metric in determining noise impacts. L_{dn} is the most widely used noise metric to evaluate land use compatibility in the United States and is both necessary and appropriate for use in the Draft GP 2020 Noise Element and DEIR.

Contrary to the comment, a single event sound level (SEL) would not be a practical way to assess General Plan traffic noise impacts. While the Ldn metric is widely accepted as a useful measure of annoyance from noise, there is not a similarly accepted correlation between single event metrics and annoyance, which makes it less useful in determining impacts. The Noise Element states that a single event noise standard may be needed to assess infrequent single events such as passage of a train, truck, or airplane. A single event standard could be developed to describe the impact of a single truck or motorcycle passing by on a highway. While this might be useful in determining impacts from a specific project, it would not be a practical way to assess General Plan traffic noise impacts. The General Plan EIR does not analyze the impacts of specific future projects, and it cannot predict future single noise events such as engine brake noise or the passage of a motorcycle group. Rather, it analyzes the cumulative impact of all uses and development that may result from implementation of the General Plan. The only practical way to discuss the future cumulative traffic volumes is by considering average traffic volumes over a period of time (i.e., the predicted number of vehicles per hour). The traffic noise prediction model developed by the Federal Highway Administration uses average volumes to predict

average noise levels. This model is widely used in the United States to identify traffic noise impacts, and was used in this EIR because it has been shown to be reasonably accurate and because it provides a meaningful measure of future noise levels. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #224-07:
Measures of the effects of local topography upon sound propagation in specific areas are beyond the scope of a countywide, program level DEIR, but would be addressed by subsequent site specific noise studies conducted in accordance with the requirements of the Noise Element. Unusual sound propagation conditions would be revealed in the noise measurement programs for subsequent specific projects. See Master Response C (Program EIR/Level of Detail).

Response to Comment #224-08:
As discussed in Impact #4.4-3 Increased Rail Noise, the Sonoma-Marin Area Rail Transit District (SMART) proposes to begin operation of the commuter rail project along the old Northwestern Pacific Railroad right-of-way between Cloverdale and the Larkspur Ferry Station, a distance of about 85 miles. It is anticipated that there would be nine stations in Sonoma County and that trains would run every 30 minutes during the peak period. There would be approximately 12 to 16 trains per day.

It is anticipated that rolling stock would be a state-of-the-art diesel multiple unit built in the United States. These trains are much quieter than standard diesel locomotives. The train under consideration by SMART has been measured to generate a passby sound level of 76-80 dBA at a distance of 50 feet from the passby. This level is similar to noise generated by a medium sized truck passing at a similar speed. Based on the activity level projected in the operations plan, the 60 L_{dn} contour would be located within the right-of-way of the line. The L_{dn} at 50 feet from the center track is projected to be about 50 dBA. The project is not anticipated to expose any existing residents to an L_{dn} of greater than 60 dB or to raise the existing L_{dn} by more than three dB.

The SMART Project Draft EIR identified significant noise impacts upon residents living near grade crossings resulting from horn noise.[2] Mitigation Measure N-5 from the SMART Project Draft EIR would identify quiet zones where other crossing controls would be utilized. Local jurisdictions may apply to the Federal Rail Administration for designation as a Quiet Zone where audible warning devices are not required. If quiet zones are designated in each of the communities where significant train horn impacts are predicted, no significant noise impacts would remain after mitigation.[3]

Response to Comment #224-09:
Draft GP 2020 Noise Element Policy NE-1c would specifically address non-transportation related noise from new projects. Policy NE-1c (4) would specifically address permissible noise levels for special events. These events would 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 would address potential cumulative noise impacts from all events in the area. Events conducted at uses requiring a discretionary permit, such as a winery, would be subject to these policies and other conditions of approval necessary to address the noise impacts of the project as well as a mitigation monitoring plan.

Response to Comment #224-10:
The noise produced by aircraft in flight, the numbers of such flights, and the areas in which aircraft may fly, are regulated by the federal government (Federal Aviation Administration). Sonoma County can regulate heliports established on private property as part of the regular land use approval process. The noise standards usually applied to heliports/helipads are the same as those applied to airports, as cited in the Draft GP 2020 Noise and Air Transportation Elements. In some cases, single event noise levels may be of concern, as recognized in the Noise Element. See also response to comment #224-06.

Response to Comment #224-11:

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[2] *Sonoma-Marin Area Rail Transit Project Draft Environmental Impact Report,* Prepared by Parsons Brinckerhoff for Sonoma-Marin Area Rail Transit District, November 2005, section 3.7 Noise and Vibration.

[3] *Sonoma-Marin Area Rail Transit Project Draft Environmental Impact Report,* Prepared by Parsons Brinckerhoff for Sonoma-Marin Area Rail Transit District, November 2005, page 3-138.

Noise generated by land uses in other counties is not part of the Draft GP 2020 project and, therefore, not addressed in the DEIR. In addition, the DEIR is a Program EIR and, as such, site specific project level impacts are addressed only as part of the countywide level of detail. See also Master Response C (Program EIR/Level of Detail). The comment about sound carrying in rural areas may be correct, however, the use of green space as a buffer is a typical and effective measure for noise reduction.

Response to Comment #224-12:
As noted in response to comment #224-05, future traffic noise level predictions were based upon the traffic volume projections developed as a part of the preparation of Draft GP 2020. These projections include the effects of casino traffic, as well as those of other planned projects, to the extent that such data were available. As a result, the predicted future traffic noise levels also account for the presence of the casino and other planned developments. For noise generated by existing land uses, the Draft GP 2020 Noise Element relies upon existing noise regulations enforced by the County Sheriff's Department. In addition, noise problems may be enforced as conditions of project approval. Thus, the Noise Element is an effective tool for controlling noise due to land uses approved since the noise standards of Table NE-2 were first adopted in 1988. It should be noted, however, that the casino is not subject to county permitting.

Response to Comment #225-01:
The comment correctly points out the work of such groups as the Western United Dairymen in reducing water quality impacts from dairy and other agricultural operations. Although additional efforts may be required during the development of 303(d) programs for areas of Sonoma County, educational programs already exist. Part of the 303(d) process is education and outreach and although the 303(d) program is administered by the Regional Water Quality Control Board, the County, and various other groups, such as local Resource Conservation Districts, will have a role in implementation. Regional Water Quality Control Board implementation typically relies on active stakeholders groups, such as Western United Dairymen, for outreach and education.

The Draft GP 2020 policy and DEIR recommended mitigation do not intend to reinvent the wheel. Rather, a General Plan contains policies that address both on going and future programs, and provides the basis for code and regulation development, revision, implementation, and enforcement where needed.

Response to Comment #225-02:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #225-03:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #225-04:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #226-01:
See Master Response C (Program EIR/Level of Detail) and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #226-02:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #226-03:
Comment noted.

Response to Comment #226-04:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The

requested change in Draft GP 2020 Objective 1.4, now Objective 2.3, is not appropriate for a General Plan Objective, particularly the notion of "requiring opportunities". As an objective, it is intended to provide a more specific expression of the overlying goal. The desired objective to protect groundwater recharge areas and to encourage new recharge opportunities is accomplished by Policies WR-2b and WR-2e, that require discretionary projects to maintain or increase pre-development absorption of runoff to the maximum extent practicable.

Response to Comment #226-05:
Comment noted. The DEIR recommends a similar policy in order to implement the FishNet4C program in Section 4.6 (Biological Resources) of the DEIR under Impact #4-6.1. The additional policy suggestions have been forwarded to the decision making bodies for consideration.

Response to Comment #226-06:
Since Impact #4.5-2 is already concluded to be less than significant, no further mitigation is required. In addition, the proposed changes in policy language for Policy WR-1g and WR-1h are not likely to significantly reduce future impacts to water quality beyond the current language. The term "prevent to the maximum extent practicable" is equivalent to "minimize," as each provides necessary support for addressing sedimentation from projects while allowing flexibility to consider the practicality of implementation. Similarly, "upgrading requirements as needed" is equivalent to "consider requirements as needed", inasmuch as the term "as needed" allows for judgment as to whether or not additional requirements are necessary.

Policy WR-1i and WR-1j have been revised to accomplish the same purpose recommended in the comment.

Response to Comment #226-07:
See response to comment #6-08.

Response to Comment #226-08:
Section 4.5 (Hydrology and Water Resources) of the DEIR addresses the impacts of Draft GP 2020 land uses and development on downstream flooding under Impacts #4.5-8, #4.5-9, and #4.5-11. In addition, the Draft GP 2020 Public Safety Element includes Policies PS-2k, PS-2l, and PS-2r that address flooding from peak runoff. Whether or not the BMPs would require construction of new facilities is unknown until the BMPs are developed. See also response to comment #6-08.

Response to Comment #226-09:
See response to comment #6-08.

Response to Comment #226-10:
Draft GP 2020 Policy WR-1m (now Policy WR-1o) has been revised to accomplish the same purpose as the recommended change.

Policy WR-1p (Now WR-1q) and Policy WR-1q (Now WR-1r) address water quality rather than the quantities of groundwater or surface water. Protection of groundwater quantities are addressed in Sections 3.2 of the Draft GP 2020 Water Resources Element, notably Policies WR-2a, WR-2c, WR-2d, and WR-2h.

Proposed Policy WR-1v is addressed by Draft GP 2020 Policy WR-2m

Proposed Policy WR-1w is addressed by Draft GP 2020 Policy WR-4b

Proposed Policy WR-1x is addressed by Draft GP 2020 Policy WR-4j

Proposed Policy WR-1z is addressed by Draft GP 2020 Policy PF-1l

The suggested policy to maintain baseline flows for water quality protection is addressed by Draft GP

2020 Water Resources Element Policy WR-1e. Until the TMDL objectives are defined and adopted, the methods for compliance cannot be determined. Furthermore, identifying and monitoring "baseline flows" involves many streamflow parameters that are not within the control of the County or any other potential management entities, since these streamflows are dependent upon rainfall, water use, and other similar factors that can vary significantly over time. In addition, maintenance of streamflows may require dams or other water detention facilities that could have other significant impacts.

Response to Comment # 226-11:
The comment does not pertain to the adequacy of the DEIR.

Response to Comment #226-12:
The available groundwater recharge maps are based upon geologic studies conducted for Sonoma County in the past by the State Department of Water Resources and other sources. These various sources were used to develop a "natural recharge" map by the Planning Department for the 1978 General Plan. While the delineation of recharge areas is not provided at a parcel specific level of detail, the maps do portray a broad picture of the areas of the County that have the geologic and soil conditions generally thought to be conducive to recharge. A comparison of these maps with the Draft GP 2020 land use maps indicates that many of the existing developed areas in the County are located in recharge areas. These include parts of Cloverdale, Forestville, Sebastopol, Graton, Larkfield, Santa Rosa, Rohnert Park, Cotati, Petaluma, Penngrove, the alluvial portions of the communities along the lower Russian River, and the Sonoma Creek corridor through the Springs Area in Sonoma Valley. Draft GP 2020 includes policies such as Policy WR-4c that are intended to protect aquifer recharge as new land uses and development are considered.

Response to Comment #227-01:
See Master Response A (DEIR Review Period).

Response to Comment #228-01:
The Urban Water Management Plan (UWMP) referred to by the comment is the responsibility of the Sonoma County Water Agency and not the County of Sonoma. Furthermore, the DEIR provides an analysis of water supply services for the unincorporated County area in Section 4.9 (Public Services). The 2005 UWMP was finally released and approved in December, 2006. See Master Response P (Urban Water Management Plans).

Response to Comment #228-02:
See Master Response G (Recirculation).

Response to Comment #228-03:
Contrary to the comment, land use issues are not ignored in Draft GP 2020. The Land Use Element addresses eighteen issues as part of the project. Rather, per Board of Supervisors direction, following extensive public input and the recommendation of the Citizens Advisory Committee, the consideration of land use map amendments has been strictly limited through the use of screening criteria imposed at the outset of the Draft GP 2020 review process. For an explanation of the role of land use changes in the Draft GP 2020, see Master Response I (Land Use Changes). See also Master Response F (Explanation for Lack of Mitigation Measures) and Master Response E (Extent of Significant Impacts).

Response to Comment #228-04:
The comment inaccurately portrays what the County staff has represented to the CAC regarding water conditions in the County. In fact, County staff has stated that the data available regarding surface and groundwater water conditions in the County are not sufficient to impose strict regulatory countywide limits on wells or other water sources at this time. Although there are some data available about conditions in different parts of the County, such as the Santa Rosa Plain, there are still many areas of the County where data are lacking. The varied geologic conditions in the county mean that much more in-depth analyses of specific conditions in each area will be needed before appropriate actions can be considered and implemented. The new Water Resources Element in Draft GP 2020 establishes the policy framework for undertaking this effort. See also Master Response R (Groundwater Management) and Master

Response S (Water Supply).

In addition, it should be noted that with respect to the comment that the Department of Water Resources (DWR) has labeled the Santa Rosa Plain as Type A, indicating "groundwater budget understood," the DWR bulletin from which this information is taken adds the following caveat: "DWR staff did not verify these Type A budgets, so DWR cannot address the accuracy of the data provided by them." See DWR Bulletin 118, Update 2003, page 106. This underscores the need for accurate data on which to base any future groundwater regulation.

Response to Comment #228-05:
See Master Response Q (SCWA Water Project) and Master Response S (Water Supply).

Response to Comment #228-06:
Comment noted. See Master Response R (Groundwater Management) and Master Response O (SB 221 and SB 610).

Response to Comment #228-07:
Comment noted. See Master Response R (Groundwater Management).

Response to Comment #228-08:
See Master Response R (Groundwater Management).

Response to Comment #228-09:
See Master Response R (Groundwater Management).

Response to Comment #228-10:
Contrary to the comment, there is no evidence of an existing "groundwater overdraft" condition or subsidence in the area of the Canon Manor West Assessment District. In fact, the 2004 Groundwater Study prepared by Todd Engineers for the EIR for that project (Canon Manor West Assessment District FEIR, 2005) found that since about 1987, the groundwater levels in the area have stabilized and even increased in some wells, indicating a new equilibrium between recharge and pumping. The DEIR, in Section 4.5 (Hydrology and Water Resources) repeated this conclusion in its description of the conditions of the Santa Rosa Plain Groundwater Subbasin on page #4.2-25. This section of the DEIR also identifies the likelihood of historical groundwater declines in this area, also based on information in the Todd Engineers study for the Canon Manor EIR. In spite of the conclusion that groundwater is not currently in overdraft condition, Draft GP 2020 recognizes the past groundwater conditions in this area and the potential for groundwater declines to occur in the future. Policy WR-2h states:

> "In recognition of concerns regarding the potential for overdraft conditions in the South Santa Rosa Plan Groundwater Basin, give a high priority to preparation of a groundwater assessment and adoption of a management plan or other appropriate actions in this area."

It should be noted that the Todd Engineers Groundwater Study prepared for the Canon Manor West EIR identified some evidence of historic groundwater capture from the Lichau Creek drainage due to an elevated level of municipal pumping by the City of Rohnert Park during the 1970s and early 1980s. In the expert opinion of the study authors, however, any further change in the groundwater divide was unlikely to occur in the future (see Canon Manor West FEIR, response to comment # 3). This is an existing hydrologic condition and not a potential impact of Draft GP 2020. Ultimately, the RWQCB agreed that the issue would be more appropriately addressed in the context of the USGS comprehensive assessment of the Santa Rosa Plain groundwater basin being coordinated by the SCWA and funded by the SCWA, the County, and the municipal groundwater users, as indicated in the letter from the RWQCB quoted in the comment.

With respect to the comment's assertion that the Draft GP 2020 DEIR must describe the details of the CMW project and its DEIR and comments, mitigation measures, and other related matters, such detail regarding a specific project is unnecessary for a General Plan Program EIR that is analyzing impacts at a

countywide level of detail. See also Master Response C (Program EIR/Level of Detail) and Master Response R (Groundwater Management).

Response to Comment #228-11:
See Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #228-12:
See Master Response S (Water Supply), Master Response R (Groundwater Management), Master Response O (SB 221 and SB 610), and Master Response C (Program EIR/Level of Detail).

Response to Comment #228-13:
Comment noted. The comment pertains to the timing of the CAC's consideration of the Draft GP2020 Water Resources Element and does not pertain to the adequacy of the DEIR.

Response to Comment #228-14:
The approved Housing Element addresses housing needs only in the unincorporated area.
Most of Sonoma County Water Agency contractors are cities and other counties that are not within the purview of the Sonoma County General Plan and Housing Element. Only the Valley of the Moon (VOM) Water District serving central Sonoma Valley and the Town of Windsor serving the Airport area are contractors to the Agency in the unincorporated area. The Forestville Water District has sufficient supply allocated to it without the need for the increased allocation. The VOM is considering additional groundwater supply in the event that the Agency is unable to secure approval of the Water Project. See also Master Response Q (SCWA Water Project) and Master Response S (Water Supply).

Response to Comment #228-15:
Comment noted. The DEIR discusses the Kleinfelder Report and its results in Section 4.5 (Hydrology and Water Resources) on page #4.5-28. The Kleinfelder Report concluded that additional data are necessary prior to determining what, if any, remedial action should be taken. The policies in the Draft GP 2020 Water Resources Element call for obtaining the necessary data. See also Master Response R (Groundwater Management).

Response to Comment #228-16:
Comment noted. See Master Response Q (SCWA Water Project) and Master Response S (Water Supply).

Response to Comment #228-17:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. It has been forwarded to the decision making bodies for consideration. The County's full response to the Grand Jury recommendation regarding an AB 3030 groundwater management plan was as follows:

> Groundwater conditions in Sonoma County are highly varied, including some areas with well-defined groundwater basins and other areas with poorly understood fractured rock aquifers. These varied conditions are not well suited to development of a single, comprehensive groundwater management plan. Further, while the extent of groundwater information in Sonoma County is increasing, this existing information is not sufficient to form the basis for a groundwater management plan as envisioned under AB 3030. Finally, the County lacks the funding to undertake a comprehensive groundwater management plan at this time.
>
> Nonetheless, the Board of Supervisors remains committed to increasing information and understanding groundwater conditions in Sonoma County as evidenced by the recent completion of the Kleinfelder pilot study of three water scarce areas, the Board's support of the Santa Rosa Plain Groundwater Study (in cooperation with the Sonoma County Water Agency, the cities of Cotati, Rohnert Park, Santa Rosa, Sebastopol and the Town of Windsor), recent implementation of new well monitoring and testing requirements and

inclusion of a Water Resources Element in the General Plan update. The Board of Supervisors recognizes that groundwater will continue to be an important public policy matter into the foreseeable future.

In fact, as noted on page #4-5-28 of the DEIR, Sonoma County has joined USGS and public water suppliers in an assessment of groundwater conditions in the Sonoma Valley that may lead to a groundwater management plan.

Response to Comment #228-18:
See Master Response O (SB 221 and SB 610) and Master Response R (Groundwater Management). The comment includes a quote from Section 4.5 (Hydrology and Water Resources) of the DEIR that relates to water quality rather than water supply. With respect to the question whether or not the Santa Rosa Plain groundwater subbasin is in overdraft condition, no evidence has been presented showing this subbasin to be currently in overdraft; see response to comment #228-10. There is, however, evidence of historical groundwater declines in the subbasin and this is stated in the DEIR.

Response to Comment #228-19:
The fact that groundwater supplies for the three municipalities (Sebastopol, Santa Rosa, and Rohnert Park) were not deemed sufficient by the USGS in 1972 to accommodate future growth in those cities was likely a major reason why cities in the central county joined to participate in the development of Warm Springs Dam. Much of the increase in water demand in that area has been met with surface water. Notwithstanding this problem, the DEIR addresses the issue of groundwater supplies for future growth in Section 4-9 (Public Services) and concludes that much more data are necessary regarding specific groundwater conditions in this basin before reliable conclusions can be drawn about the adequacy of supplies to meet demand. In the meantime, the County, since the 1980's, has restricted rural development in this basin through its Land Use Element and growth policies and proposes to continue to do so in Draft GP 2020. See also Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #228-20:
The impacts of Draft GP 2020 on water supply for the unincorporated area are addressed in Section 4.9 (Public Services). The cumulative water supply impacts are addressed in Section 6.2 (Cumulative Impacts). The County does not have the authority to ”bring municipal water systems and water districts into a coordinated water management scheme” since these agencies are not under the authority of the County. However, Draft GP 2020 includes policies that encourage water suppliers to work with the County to manage water resources in a coordinated way. See also Master Response B (Jurisdiction), Master Response R (Groundwater Management), and Master Response S (Water Supply).

Response to Comment #228-21:
See response to comments #228-10 and #228-18 regarding the lack of evidence of a current state of overdraft in the South Santa Rosa Plain. The Draft GP 2020 proposes to include a Water Resources Element with specific goals, objectives, and policies that would increase water resource management.

Response to Comment #228-22:
See response to comment #228-21.

Response to Comment #228-23:
The County has not determined the recharge rate for the South Santa Rosa Plain Groundwater Basin, but is cooperating with the USGS and the Sonoma County Water Agency in a study of groundwater conditions in this basin. See also Master Response R (Groundwater Management).

Response to Comment #228-24:
See response to comment #228-23. The County has not independently studied the groundwater production from this basin.

Response to Comment #228-25:

The County would permit construction in the unincorporated areas provided that the construction project met all County policies, codes, and environmental review requirements. The impacts of the project on the recharge rate of the basin cannot be determined until a project application is submitted. However, since most projects in the unincorporated part of this area are rural in nature or rely upon Russian River surface water, the impact is not likely to be significant. In addition, Policy WR-2f would require discretionary projects in urban areas to meet or exceed pre-development absorption of runoff to the maximum extent practicable.] Nonetheless, as noted in Section 4.5 of the DEIR, under Impact #4.5-5 (Groundwater Level Decline), the lack of sufficient information about groundwater conditions at the current time does not allow a conclusive determination regarding the impacts of this rural growth on groundwater conditions and/or recharge rates.

Response to Comment #228-26:
See response to comment #228-25.

Response to Comment #228-27:
See response to comment #228-25.

Response to Comment #228-28:
County efforts to address groundwater declines in this Basin have focused on preparation and adoption of a Water Resources Element as part of the GP 2020 Update. If adopted, this Element would establish County water resource management goals, objectives, and policies that would guide future actions to address groundwater problems where necessary and feasible throughout the county. See Master Response C (Program EIR/Level of Detail) and Master Response R (Groundwater Management).

Response to Comment #228-29:
See Master Response C (Program EIR/Level of Detail).

Response to Comment #228-30:
See response to comment #228-25 and Master Response C (Program EIR/Level of Detail).

Response to Comment #228-31:
The comment references the DEIR section on the water quality impacts of agricultural and resource uses, not the groundwater impacts of timber operations. The impacts of all Draft GP 2020 land uses and development, including timber operations, on water quality are addressed in Section 4.5 (Hydrology and Water Resources), under Impact #4.5-5 (Groundwater Level Decline). Timber operations are under the jurisdiction of the California Department of Forestry and Fire Protection and include the required environmental review as part of the harvest plan review process. The Department of Fish and Game and the Regional Water Quality Control Board also consult with CDF during this process. Water pollution from resource development is addressed under Impact #4.5-3 of Section 4.5 (Hydrology and Water Resources) of the DEIR. Should water resources be polluted, they would be required to be treated to meet applicable federal and/or state water quality standards before consumption.

Response to Comment #228-32:
As stated on page #4.5-54 of the DEIR, the conclusion that groundwater level decline is a significant and unavoidable impact is based on the determination that until groundwater assessments are prepared, there is not enough current information regarding groundwater availability and the sustainable yield of aquifers. Draft GP 2020 includes goals, objectives, and policies that would provide for improved management of groundwater in the future through a combination of data collection, monitoring, and appropriate management actions where sufficient scientific justification is in evidence. The tools that would be used are dependent upon the circumstances of the applicable groundwater conditions.

Response to Comment #228-33:
This is not a comment on the adequacy of the DEIR.

Response to Comment #228-34:
This is not a comment on the adequacy of the DEIR.

Response to Comment #228-35:
This is not a comment on the adequacy of the DEIR.

Response to Comment #228-36:
This is not a comment on the adequacy of the DEIR.

Response to Comment #228-37:
This is not a comment on the adequacy of the DEIR.

Response to Comment #228-38:
This is not a comment on the adequacy of the DEIR.

Response to Comment #228-39:
This is not a comment on the adequacy of the DEIR.

Response to Comment #228-40:
This is not a comment on the adequacy of the DEIR.

Response to Comment #228-41:
See response to comment #263-13.

Response to Comment #228-42:
The proposed Graton Rancheria Casino and Hotel is a project of a sovereign tribe not under the jurisdiction of the County. The nature of the adequacy of the water supply and related groundwater conditions are unknown at this time, and the impacts of the project are the subject of an Environmental Impact Statement that has yet to be released for public review.

Response to Comment #228-43:
See Master Response Q (SCWA Water Project). What specific actions the City of Rohnert Park will take in the event of an emergency or impairment of its water supply from the Sonoma County Water Agency is speculative and beyond the scope of this Program EIR for Sonoma County's Draft GP 2020.

Response to Comment #228-44:
Comment noted. The information has been presented to the decision making bodies for consideration. See Master Response F (Explanation for Lack of Mitigation Measures).

Response to Comment #229-01:
See Master Response A (DEIR Review Period).

Response to Comment #230-01:
Comment noted. See responses to comments #230-02 through #230-51.

Response to Comment #230-02:
Contrary to the comment, the DEIR contains numerous feasible mitigation measures throughout the impact analysis in Section 4 that would lessen the significant environmental impacts of Draft GP 2020. In addition, to the extent comments on the DEIR have identified feasible policy mitigation measures that could further reduce an impact, they have been included in this document and have been presented to the decision making bodies for consideration.

Response to Comment #230-03:
Comment noted. See responses to comments #230-04 through #230-51.

Response to Comment #230-04:
Agricultural support uses are described in Goal AR-5 in Section 2.5 of the Draft GP 2020 Agricultural Resources Element. They include agricultural processing, agricultural support services, storage, bottling,

canning, packaging, etc. The impacts of these and other uses allowed under Draft GP 2020 are addressed in several sections of the DEIR. Specifically, impacts on water resources are addressed in Sections 4.5 (Hydrology and Water Resources) and 4.9 (Public Services); impacts on visual resources in Section 4.11 (Visual Resources); noise impacts in Section 4.4 (Noise); public safety impacts in Sections 4.5 (Hydrology and Water Resources), 4.7 (Geology/Soils), 4.9 (Public Services) and 4.13 (Hazardous Materials); and circulation impacts in Section 4.2 (Transportation). Conflicts between non-agricultural uses and agricultural uses are addressed in Section 4.1 (Land Use, Population, and Housing).

Response to Comment #230-05:
Contrary to the comment, agricultural support uses as described in Goal AR-5 of the Draft GP 2020 Agricultural Resources Element do not require extension of public sewer and water services. By assisting agricultural production to remain economically viable, these uses *reduce* parcelization and the threat of non-agricultural development. The growth-inducing impacts of Draft GP 2020 are addressed in Section 6.1 (Growth Inducing Impacts) of the DEIR. With respect to the referenced study in Sonoma Valley, see response to comment #230-07. Section 4.2 (Transportation) of the DEIR describes the methodology for the traffic analysis of Draft GP 2020 land uses and development. The 2020 projected growth is summarized in response to comment #266-07.

Response to Comment #230-06:
The Draft GP 2020 Work Plan assures consistency with zoning either by including conforming zone changes concurrently with the adoption of the Plan or by the inclusion of programs to revise zoning to achieve consistency following approval of the Plan. The comment does not identify any specific conflicts that would result from adoption of Draft GP 2020 that are not resolved by these two methods.

Response to Comment #230-07:
The referenced study entitled "The Potential Event Facilities on Agricultural Land in Sonoma Valley" assumes a much greater rate of event uses than has occurred at any time in the past or present. The DEIR utilized two hypothetical scenarios for estimating future wineries and events. One scenario described under Impact #4.8-2 and #4.8-3, is based upon a projection of about 75,000 acres of wine grape production. The other, identified under the Buildout Alternative in Section 5.0 (Alternatives) assumes a 30% greater level of cultivation (roughly 100,000 acres). Both scenarios were linked to future wine grape production at a rate that is consistent with past long term trends in the viticultural industry and with consideration of the production capabilities of the soils and climate in the rural area. See also response to comment #219-08 and #251-08.

Response to Comment #230-08:
The comment confuses events and tasting rooms, which are visitor-serving uses, with agricultural support uses such as processing, canning, etc. described in Goal AR-5. Visitor-serving uses on agricultural lands are governed by Section 2.6 of the Draft GP 2020 Agricultural Resources Element. The impacts of these uses are addressed in the topical sections of the DEIR along with all land uses and development under Draft GP 2020.

Response to Comment #230-09:
See response to comments #230-04, #230-07, and #230-08.

Response to Comment #230-10:
The Right to Farm Ordinance does not extend to agricultural tourism operations.

Response to Comment #230-11:
Draft GP 2020 already designates areas where agricultural support uses can be accommodated on the Draft GP 2020 Land Use Maps. If the comment is intended to suggest that the eligible areas be further limited, then it could result in an undue concentration of support uses that could result in excessive noise, traffic, land use, and other impacts and may not offer a net benefit in reducing these impacts. It also would threaten the viability of agriculture if the necessary processing facilities are not available in the production areas. The Draft GP 2020 includes Policy AR-5g that provides policy support for avoiding such concentrations. See also response to comment #237-32.

Response to Comment #230-12:
Wine appellations and growers and winemakers associations already exist in Sonoma County that assist in marketing agricultural products. Often, these activities occur in urban areas. Even if it were physically possible to accommodate processing of all agricultural products in urban areas, impacts such as land use compatibility, traffic, and noise would be far worse due to the proximity of residential uses. See also response to comments #230-11 and #237-32.

Response to Comment #230-13:
See response to comments #230-11 and #237-32.

Response to Comment #230-14:
Agricultural processing facilities are treated the same as other industrial uses. In fact, both Draft GP 2020 and its implementing codes endeavor to avoid residential uses in agricultural areas due to the conflicts that often arise from residents in these areas.

Response to Comment #230-15:
The DEIR statement applies to lands that are not designated Scenic Resources in the Draft GP 2020. The Franz Valley Area Plan also includes scenic resources that are protected by policies in that Plan rather than GP 2020. From a countywide perspective, the Franz Valley area is only a small portion of the County that is not protected by the GP 2020 Scenic Resource Policies. As a result, the DEIR's conclusion regarding Impact #4.11-2 and cumulative impacts would not change.

Response to Comment #230-16:
Section 4.11 (Visual Resources) of the DEIR under Impact #4.11-3 (Light Pollution and Nighttime Sky) acknowledges the fact that light pollution will occur, in spite of Draft GP 2020 policies to reduce these impacts and therefore concludes that the impact is significant and unavoidable.

Response to Comment #230-17:
A discussion of the adverse effects of nighttime lighting on wildlife and biological resources is provided in Section 4.11 (Visual Resources) of the DEIR under Impact #4.11-3. Policies OSRC-4a, OSRC-4b, and OSRC-4c would minimize the potential for additional light and glare. However, excessive nighttime lighting could still be disruptive to native wildlife activity. In response to the comment, Policy OSCR-7e, now OSRC-7d is recommended to be amended as follows:

> **"Policy OSRC-7d:** In all areas outside Urban Service Areas, encourage property owners to utilize wildlife friendly fencing **and to minimize the use of outdoor lighting which could disrupt native wildlife movement activities."**

Response to Comment #230-18:
See response to comment #181-01. Draft GP 2020 and proposed conforming amendments of the Area and Specific Plans assure that consistency between the General Plan and the Franz Valley Area Plan is maintained. Since the current Franz Valley Area Plan does not include Scenic Landscape Unit designations, there is no internal consistency issue arising from the Draft GP 2020. Any revision to Draft GP 2020 that includes new Scenic Landscape Unit Designations will be reflected in the Area Plan as necessary to maintain consistency.

Response to Comment #230-19:
Community Separators are intended to provide for separation or containment of urban areas. Since there are no urban areas in proximity to the Franz Valley Area Plan boundaries, the designation of lands as Community Separators is inconsistent with this purpose. The large parcel, resource conservation zoning of the Franz Valley Plan is implemented through the Land Use Plan for that area. The Franz Valley area has not been designated as a Scenic Landscape Unit because the potential reduction in visual impact in this portion of the County was not considered significant in light of the minimal amount of future development allowed in this area by Draft GP 2020 and the existing protections in the Franz Valley Area Plan. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #230-20:
Outright prohibition of uses that propose night lighting either in an Area Plan or through the permitting process is not a feasible mitigation measure since lighting may be necessary for security, public safety, or other purposes. Draft GP 2020 includes policies to develop lighting standards that can be applied to future uses in order to minimize impacts, such as shielding light sources to prevent upward or offsite light spillage.

Response to Comment #230-21:
Draft GP 2020 includes Policies OSRC-4a, OSRC-4b, OSRC-4c, and OSRC Program #7 to develop lighting standards that will reduce visual impacts. This measure is effectively the same as suggested in the comment.

Response to Comment #230-22:
Current PRMD Codes and procedures generally require that a change in the conditions of project approval be reviewed and decided by the decision making body for the original condition, unless the review authority has been specifically delegated to a lower level hearing body or administrative authority. Public notice is provided in cases where the original permit was subject to public notices and review.

Response to Comment #230-23:
As noted in the response to comment #224-05, the traffic noise level predictions were based upon the traffic volume projections developed as a part of the preparation of the Draft GP 2020. These projections include the effects of casino traffic, as well as those of other planned projects. As a result, the predicted future traffic noise levels also account for the presence of the casino and other planned developments.

As noted in response to comment #224-07, measures of the effects of local topography upon sound propagation in specific areas are beyond the scope of the DEIR (see Master Response C (Program EIR/Level of Detail),, but would be addressed at the project level by site specific noise studies conducted in accordance with the requirements of the Noise Element. Unusual sound propagation conditions should be uncovered in the noise measurement programs for specific project. Section 4.4 (Noise) of the DEIR describes the noise survey conducted for Draft GP 2020 beginning on page #4.4-10. This approach is consistent with the generalized focus of the General Plan. On-site measurements are routinely required as part of site-specific noise studies, in accordance with Draft GP 2020 Noise Element Policy NE-1d. See also response to comments #224-05, #224-06, and #224-07.

Response to Comment #230-24:
The Draft GP 2020 Noise Element includes policies to reduce noise impacts. Mapping of noise sensitive areas countywide is not feasible, as explained in response to comment #224-04. See Master Response C (Program EIR/Level of Detail) and Master Response J (Buildout).

Response to Comment #230-25:
Contrary to the comment, cumulative development has been defined in the DEIR at a level of detail appropriate for a countywide General Plan and Program EIR. For example, the roadway noise is based upon the results of a traffic model which included projected land uses and development for cities, neighboring counties, and the cumulative projects listed in Section 6.2, Page #6.0-4. See also Master Response C (Program EIR/Level of Detail), Master Response J (Buildout), and Master Response I (Land Use Changes).

Response to Comment #230-26:
See response to comment #230-23**.** The Draft GP 2020 and DEIR include policy mitigation measures such as Noise Element Policy NE-1d to reduce noise resulting from future land uses and development.

Response to Comment #230-27:
The DEIR addresses the noise impacts of Draft GP 2020 on noise sensitive land uses in Section 4.4 (Noise) under Impact #4.4-4. The adoption of a noise ordinance is not included as a mitigation measure

to reduce these noise impacts. Draft GP 2020 provides noise standards and policies for reducing noise impacts from future land uses and development. The Planning Commission has revised Draft GP 2020 to delete the policy to adopt a noise ordinance in favor of relying upon the existing noise regulations administered and implemented by the County Sheriff's Department for control of noise from existing uses. These existing regulations provide another means of noise control in addition to the Draft GP 2020 noise policies discussed in the DEIR. Since the Draft GP 2020 and existing County noise regulations are sufficient to reduce Impact #4.4-4 to a less than significant level, the addition of Area Plan standards to accomplish the same purpose is not necessary. Noise impacts resulting from uses requiring a use permit are addressed as part of the review of the project.

Response to Comment #230-28:
See response to comment #224-04. Mapping of all noise sensitive uses is also infeasible and beyond the scope of a program EIR for a general plan, since it would require mapping every residence, school, library and other similar uses. See Master Response C (Program EIR/Level of Detail).

Response to Comment #230-29:
See response to comment #230-24. The Draft GP 2020 Noise Element policies provide authority to impose conditions to restrict noise levels associated with new development through the project review process.

Response to Comment #230-30:
The comment suggests that a statement of overriding considerations to support the adoption of GP 2020, notwithstanding its potentially significant and unavoidable water supply impacts, would not be legally defensible where feasible mitigation measures have not been implemented. The comment is correct that a statement of overriding considerations alone is not sufficient to justify the approval of a project that has significant and unavoidable impacts; rather, the decision-making body must also independently find that "specific economic, legal, social, technological, or other considerations . . . make infeasible the mitigation measures or project alternatives identified in the final EIR." (Pub. Res. Code, § 21081, subd. (a)(3); State CEQA Guidelines, § 15091, subd. (a)(3).) If warranted, that finding would be made by the Board of Supervisors at the time of its approval of the proposed project.

With respect to the suggestion that the County must limit new demand on water resources to mitigate the water-related impacts of GP 2020, see Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #230-31:
See Master Response R (Groundwater Management).

Response to Comment #230-32:
The DEIR addresses the impacts of Draft GP 2020 land uses and development that would occur if proposed stream setbacks were not adopted, including flooding, landslides, soil erosion, etc., as part of the analysis of the No Project Alternative in Section 5.0 (Alternatives) of the DEIR.

Response to Comment #230-33:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 goals, objectives, and policies represent an internally consistent approach to land use and resource protection for the county unincorporated area. Each element includes an introduction that explains how the elements relate to each other and how policies are formatted to cross reference all elements that work together to achieve the goals and objectives.

Response to Comment #230-34:
Section 4.8 (Agriculture and Timber Resources) of the DEIR concludes that conversion of agricultural lands to non-agricultural uses is a less than significant impact and that no additional mitigation is required. In addition, agricultural support uses and tourism are essential value-added uses for sustaining the viability of agricultural production in Sonoma County. Outright prohibition of these uses could lead to

increased pressure from residential and other non-agricultural uses that are incompatible with production, resulting in much more significant loss of agricultural land in the future.

The identification of an impact as a significant "irreversible change" pursuant to CEQA Guidelines section 15126.2(c) recognizes that nonrenewable resources will be used as a result of the project; however, it does not change the conclusion in the DEIR that a particular impact will be less than significant with the implementation of mitigating policies identified in the DEIR.

The issuance of Administrative Certificates of Compliance (ACCs) is not a discretionary action and the County cannot legally impose such a condition on the ACC. With regards to the Williamson Act, parcels under Williamson Act contracts are already contractually bound to limit the use of land to agriculture and compatible uses. Even if ACCs are approved, the parcels remain bound by the provisions of the Agricultural Preserve contract.

Response to Comment #230-35:
The DEIR makes no claim that conversion of timberland to agriculture replaces lost agricultural land.

Response to Comment #230-36:
Section 4.8 (Agriculture and Timber Resources) of the DEIR on page #4.8-11 acknowledges that once the effort and expense is made to convert timberland to cropland, it is seldom converted back and would be permanently lost to the timberland inventory. The discussion of the impact of conversions on the timberland inventory is set forth on pages #4.8-28, #4.8-29 and #4.8-30. Existing regulations of timberland conversions recently adopted as a result of the Draft GP 2020 recommendations address these impacts.

The impacts from the loss of forested lands converted to agricultural uses are addressed in Section 4.6 (Biological Resources) and other impact analyses in each of the topical sections of the DEIR. The suggestion that the County limit timber harvests to selective harvests is not feasible as these harvests are under the sole jurisdiction of the California Department of Forestry and Fire Protection. See also Master Response B (Jurisdiction).

Response to Comment #230-37:
Section 4.6 (Biological Resources) of the DEIR addresses the impacts of Draft GP 2020 on biological resources. "Native forests" are not defined in the comment, but they are presumed to refer to habitats dominated by tree species where a diverse range of fish and wildlife may exist. As such, they fall within the categories "Sensitive Natural Communities" and "Special Status Species" analyzed in Section 4.6. In both cases, the DEIR concludes that the impacts of Draft GP2020 are significant and unavoidable, in spite of the inclusion of numerous policies and programs that would reduce those impacts.

Response to Comment #230-38:
Contrary to the comment, Impact #4.5-4 does account for new development that might occur during the life of GP 2020. Existing regulations of the Regional Water Quality Control Boards and other regulatory agencies provide oversight of new development that will either include a new septic system or will be connected to an existing wastewater treatment facility. Draft GP 2020 also includes policies that provide mitigation for water quality impacts from new wastewater disposal facilities and operations. In both cases the impact on water quality will be less than significant. As stated on page #4.5-49 most water quality issues result from existing old or failing septic systems or infrequent wastewater treatment plant discharges. See also Master Response J (Buildout).

The Draft GP 2020 is a policy document that provides guidance to others involved in the planning and engineering design process. Waste discharges, or changes in discharge quantities and locations, are implemented by other county and special districts apart from the General Plan process, and are primarily regulated by the Regional Water Quality Control Board. Any significant changes in wastewater discharges will be subject to additional research and water quality investigations, with subsequent CEQA review and public hearings associated with regulatory review and approval by the Regional Water Quality Control Board and other responsible oversight agencies.

Response to Comment #230-39:
The comment is correct in that the DEIR states that data are not available regarding the future loss of agricultural land to non agricultural uses allowed by Draft GP 2020. This is primarily due to the fact that the extent of these uses is unpredictable. However, these uses have been permitted on agricultural lands for several decades through at least two full General Plan updates. During that period, agricultural lands remain productive and viable without undue loss of productive land. In addition, Draft GP 2020 retains the existing policies in its Land Use and Agricultural Resources Elements, such as Policy AR-4a, that restrict non agricultural uses unless agricultural production remains the primary use of the parcel. As a result, the DEIR's conclusion that this impact is less than significant is reasonable.

Response to Comment #230-40:
Contrary to the comment, the DEIR includes, in Section 4.8 (Agricultural and Timber Resources), a projected level of agricultural processing and support uses with estimated acreage that would be lost for future agricultural production. It is not known where these facilities would be located, but they are presumed to be on agricultural lands shown on the Draft GP 2020 Land Use Maps. Based upon the fact that these uses have not caused a significant loss of agricultural production in the past, and the fact that there are over 800,000 acres of land area available for agricultural production, the DEIR conclusion that this impact is less than significant impact is reasonable. A cap on such uses, beyond what is currently provided in Draft GP 2020 policies, is unnecessary and runs counter to the needs of agriculture to have support facilities in place for production activities. See also response to comment #266-56, #266-59, and #230-39 and Master Response J (Buildout).

Response to Comment #230-41:
As the comment notes, the DEIR, under Impact #4.8-3 (Agricultural Tourism), points out that agricultural tourism uses are associated with agricultural processing and support uses (typically, wineries). For example, events are often held within processing facilities, tasting rooms and storage buildings. As a result, the loss of agricultural land to tourism overlaps with the loss of agricultural land to processing and support uses identified under Impact #4.8-2 (Agricultural Processing and Support Uses). Therefore, the DEIR conclusion that this impact is less than significant is reasonable. See also response to comment #230-40.

Response to Comment #230-42:
See response to comment #230-40 and #230-41.

Response to Comment #230-43:
The comment appears to suggest that the DEIR fails to analyze the land uses already permitted under the existing General Plan. To the contrary, the DEIR analyzes the impacts of all land uses and development shown on the Draft GP 2020 land use maps, including those carried forward from the 1989 General Plan, and compares them to the existing environment. See also Master Response I (Land Use Changes).

Response to Comment #230-44:
Contrary to the comment, the full range of land uses and development, including agricultural support uses, is shown on the Draft GP 2020 land use maps and is described in various sections of the DEIR, including Section 4.1 (Land Use, Population, and Housing), Section 4.8 (Agriculture and Timber Resources), and Section 5 (Alternatives). See also Master Response J (Buildout).

Response to Comment #230-45:
See Master Response J (Buildout).

Response to Comment #230-46:
See Master Response J (Buildout). None of the cases cited in the comment require the DEIR to evaluate the full buildout of every parcel in the unincorporated County, regardless of the likelihood that the development would occur. Rather, the cases stand for the proposition that an EIR must evaluate the reasonably anticipated future development permitted by the plan or project under consideration. The

DEIR has done this by analyzing the impacts of the future uses and development reasonably anticipated to occur under Draft GP 2020, given projected growth and the constraints that would prevent development of particular parcels.

Response to Comment #230-47:
See Master Response J (Buildout).

Response to Comment #230-48:
See response to comment #266-07. Since the Draft GP 2020 land use designations (as well as existing General Plan designations) have a theoretical capacity for land uses and development that is greater than the growth that is projected, the DEIR analyzes the Buildout Alternative in Section 5.0 (Alternatives). The impacts of Draft GP 2020 wineries and other land uses and development are addressed in each of the topical sections. See Master Response J (Buildout).

Response to Comment #230-49:
See Master Response I (Land Use Changes) and response to comment #230-43 and #230-44. Growth within the unincorporated county is constrained by the Draft GP 2020 land use maps. Policy LU-2a has been effective in the past in reducing the likelihood that map amendments would be approved.

Response to Comment #230-50:
See response to comment #266-51 and Master Response J (Buildout).

Response to Comment #230-51:
See Master Response J (Buildout) and response to comment #266-51.

Response to Comment #231-01:
The benefits of vegetated buffer zones along waterways in reducing impacts on water quality are recognized in Impacts #4.5-1, #4.6-2, #4.6-3, and #4.6-8; in reducing flooding risks in Impacts #4.5-9 and #4.5-11; in reducing landslide and erosion impacts in Impact #4.7-6; and as habitat in Impacts #4.6-1, #4.6-2, #4.6-3, and #4.6-4. The Draft GP 2020 discusses in its background text the rationale for the goals, objectives, and policies in each section. These discussions often highlight the benefits of the policies which follow. The Public Safety, Water Resources, Agricultural Resources, and Open Space and Resource Conservation Elements include these discussions. Draft GP 2020 will be reviewed prior to adoption to assure that it is internally consistent, as required by law.

Response to Comment #231-02:
This comment pertains to background text in Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 includes appropriate language that provides the necessary linkages among the various elements and that assures internal consistency.

Response to Comment #231-03:
Contrary to the comment, State law does not require that similar policy statements be included in every possible element. Draft GP 2020 text provides the appropriate linkages among elements that recognize that policies in one element may also implement goals and objectives in another element. For example, each element contains a section entitled “Relationship to Other Elements.”

Response to Comment #231-04:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Draft GP 2020 includes Policy OSRC-8a that designates streamside conservation areas along all USGS mapped streams. This designation and its applicable standards provide habitat connectivity in these areas.

Response to Comment #231-05:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR.

Response to Comment #231-06:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Draft GP

2020 Goal OSRC-8, Objective OSRC-8.3, and Policies OSRC-8d and OSRC-8e have been modified to include additional purposes for stream protection.

Response to Comment #231-07:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Draft GP 2020 Policy OSRC-8o has been added to support educational programs to protect riparian corridors.

Response to Comment #231-08:
The DEIR addresses these impacts in the following sections. Section 6.2 (Cumulative Impacts) addresses the cumulative impacts of Draft GP 2020 as well as the impacts of the cumulative projects on biological habitat under "Biological Resources," and on flooding and water resources under "Hydrology and Water Resources". Section 5.0 (Alternatives) of the DEIR addresses the impacts of buildout under the "Buildout Alternative". See also Master Response J (Buildout).

Response to Comment #232-01:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #232-02:
The comment pertains to a policy issue regarding Draft GP 2020 and not to the adequacy of the DEIR. The Planning Commission has requested additional policy options for stream protection for its consideration and has, in effect, moderated the Public Hearing Draft GP 2020 policies regarding streamside conservation zones in Section 3.2 of the Open Space and Resource Conservation Element.

Response to Comment #232-03:
Baseline data were collected and used for cumulative impact analysis in the DEIR. For example, traffic data are provided in Section 4.2 (Transportation), noise data in Section 4.4 (Noise), etc. of the DEIR. . The Draft GP 2020 Land Use Element includes Policies LU-1d, LU-1e, and LU-1f and Programs 7 and 8 for monitoring of the effectiveness of the General Plan over time. In addition, Agricultural Resources Element Policy AR-6d and Program #7 establish an event coordination program designed to track and monitor visitor serving activities to better understand baseline conditions for these uses.

Response to Comment #232-04:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. See also Master Response R (Groundwater Management).

Response to Comment #232-05:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. See also Master Response N (Climate Change).

Response to Comment #232-06:
See Master Response P (Urban Water Management Plans) and Master Response S (Water Supply).

Response to Comment #232-07:
See response to comment #6-15.

Response to Comment #232-08:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Draft GP 2020 Policies CT-1n, CT-1p, CT-5b, and CT-5c have been modified to address the nexus requirement. See response to comments #2-07 and #5-03.

Response to Comment #232-09:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Section 7 of the Draft GP 2020 Open Space and Resource Conservation Element has been revised to include a broad array of policies and programs to reduce greenhouse gas emissions from both private development and County operations. See also Master Response N (Climate Change)

Response to Comment #232-10:
This comment pertains to a policy issue regarding Draft GP2020 and not to the adequacy of the DEIR. Draft GP 2020 includes policy support for Urban Service Boundaries or Urban Growth Boundaries and the Sonoma County Agricultural Preservation and Open Space District (Policy OSRC-1h, AR-8a, and others).

Response to Comment #232-11:
See Master Response M (Solid Waste Management).

Response to Comment #232-12:
The DEIR includes the two known casino projects in its analysis. The Dry Creek Rancheria Casino (River Rock) is included as an existing use, having been established in the early 2000s. The Graton Rancheria Hotel and Casino project is proposed, but has not been approved or built. It is included in the projected land uses and development under Draft GP 2020, even though the project is not consistent with the Draft GP 2020. It is listed as one of the Cumulative Projects on page #6.0-4 of the DEIR. However, the exact nature and intensity of the project is not yet known, since it is still in the environmental review process under NEPA.

Response to Comment #232-13:
Comment noted.

Response to Comment #233-01:
The comment is correct that cultivation of new vineyards has slowed in recent years. However, the projection of future cultivation in the DEIR is a longer term projection that considers the economic cycles that affect such growth and it relies more heavily upon trends that took place prior to the recent downturn. These figures were also developed in conjunction with vineyard representatives who are familiar with these trends. If slower rates of vineyard cultivation continue, impacts resulting from development of vineyards would be less than stated in the DEIR.

Response to Comment #233-02:
See response to comment #219-19.

Response to Comment #233-03:
The comment pertains to a policy issue regarding Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 policies were formulated with ample explanation of existing VESCO requirements and technical background regarding adequacy of setbacks for sediment filtration. However, stream setbacks serve multiple additional purposes in addition to sediment filtration. See also response to comment #219-17 and #231-01.

Response to Comment #233-04:
Comment noted. Since there are no data available indicating the acreage of wetlands in Sonoma County, this information could not be presented. The general extent of known wetlands is shown in Exhibit #4.6-3 of the DEIR. Setbacks for development from wetlands are based upon the need for avoidance of impacts from runoff, sedimentation, and other disturbances from land uses in close proximity to wetland areas, as described in Impact #4.6-3.

Response to Comment #233-05: . However, since setbacks occur only in narrow strips of land along streams, it is not expected to be significant relative to the total land in this classification. CEQA does not require an analysis of economic and social impacts of a project unless such impacts are likely to result in physical changes to the environment.

Response to Comment #233-06:
Draft GP 2020 Policy WR-2c has been revised to clarify that well repairs would not trigger a groundwater study under Policy WR-2e (now WR-2d). Policy WR-2f (now WR-2e) has been revised to be mandatory

in Urban Service Areas and voluntary in rural areas. Minimizing impervious surfaces to increase or maintain absorption relies upon soils to filter potential contaminants. Since it is recommended by the RWQBSs, the state agencies charged with protecting water quality, it is not expected to adversely affect groundwater quality.

Response to Comment #234-01:
See Master Response A (DEIR Review Period).

Response to Comment #235-01:
See Master Response G (Recirculation).

Response to Comment #235-02:
See Master Response P (Urban Water Management Plans).

Response to Comment #235-03:
The DEIR acknowledges the uncertainties regarding the availability of Sonoma County Water Agency water, including uncertainties about approval of the Water Project, the Eel River diversions, and the requirement of minimum streamflows to protect threatened species in Section 4.9 (Public Services) on pages #4.9-4 and #4.9-5. Impact #4.9-1 is determined to be significant and unavoidable in part because of these uncertainties. At the same time, the DEIR notes on page #4.9-22 that only about five percent of the proposed increased diversions from the Water Project would serve growth and development in the unincorporated County. See also Master Response G (SCWA Water Project), Master Response S (Water Supply), and Master Response N (Climate Change).

Response to Comment #235-04:
See Master Response P (Urban Water Management Plans) and Master Response A (DEIR Review Period).

Response to Comment #235-05:
Comment noted. The DEIR in Section 4.5 (Hydrology and Water Resources) cites the important studies that bear on the program level analysis of the DEIR, including past DWR studies, the Canon Manor West EIR, the Kleinfelder Reports, and the Rohnert Park Water Supply Assessment. The comment identifies additional documents and studies. Some of these are already referenced in the DEIR and some are individual or staff memos that may prove useful in comprehensive evaluations of groundwater conditions in specific groundwater basins but are of limited value in determining countywide impacts on groundwater from Draft GP 2020. In any case, these additional documents do not change the overall conclusions of the DEIR with respect to impacts on groundwater. See Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #235-06:
See response to comment #235-05. Section 4.5 of the DEIR (Hydrology and Water Resources) identifies existing regulations and proposed policies in Draft GP 2020 that will reduce the impacts of potential groundwater decline (Impact #4.5-5) in the future. However, the DEIR notes that the available policy measures would not be sufficient to reduce these impacts to a less than significant level for several reasons, primarily the lack of available data regarding groundwater conditions and the legal justification to take regulatory action in the absence of such data. See also Master Response R (Groundwater Management).

Response to Comment #235-07:
See Master Response R (Groundwater Management).

Response to Comment #235-08:
The comment accurately portrays what the DEIR says about the Kleinfelder Report in the background discussion under Section 4.5 (Hydrology and Water Resources). However, the DEIR goes on to state, under Impact #4.5-5 (Groundwater Level Decline), that evidence indicates groundwater declines have already occurred in some areas. It should also be noted that the Kleinfelder Report concluded that

additional study was necessary prior to determining what, if any, remedial action should be taken; Draft GP 2020 polices support this effort. See Master Response R (Groundwater Management).

Response to Comment #235-09:
The comment may be referring to page #4.5-37 rather than page #4.9-20. The statement is accurate and is followed up by a summary of the agencies that the County could cooperate with in groundwater management. See also Master Response B (Jurisdiction) and R (Groundwater Management).

Response to Comment #235-10:
Comment noted. The statement in Section 4.5 (Hydrology and Water Resources) under Groundwater Management is a statement regarding the history of groundwater regulation and management of usage and withdrawal, not a statement about the number of agencies with groundwater management plans. In fact, contrary to the implication of the comment, according to DWR staff many of these past plans in other jurisdictions address minor technical matters related to well drilling and do not regulate usage or withdrawal of groundwater.[4] However, these plans can be successful in providing a nexus for future regulation of groundwater by ordinance. Currently approximately 35 counties have groundwater ordinances, but less than ten actually regulate groundwater usage or withdrawal.[5]

As the comment also notes, the statement in Section 4.9 (Public Services) regarding AB 3030 is also accurate. In addition, the proposed Water Resources Element of Draft GP2020 includes policies recommending that groundwater assessments and appropriate management actions be conducted when and where the groundwater conditions so warrant. Since the County is not a water provider under AB 3030 it will need the participation of water providers to conduct effective groundwater management planning in Sonoma County. See also Master Response R (Groundwater Management).

Response to Comment #235-11:
Both Draft GP 2020 (in the Water Resources Element) and the DEIR (in Section 4.5 (Hydrology and Water Resources) and Section 4.9 (Public Services)) include policies/mitigation measures to address potential groundwater decline and related water supply problems. This is accomplished through a three step strategy of improved data collection regarding groundwater conditions, periodic reporting of problem areas, and management actions designed to address the identified problem. See also Master Response R (Groundwater Management).

The DEIR preparers disagree that Draft GP 2020 policies "will dramatically increase water demand" as described in the comment. To the contrary, a fundamental tenet of the proposed plan is that the county should accommodate only its fair share of regional growth, as required by state law. In addition, Draft GP 2020 includes numerous goals, objectives, and policies in the new Water Resources Element to reduce water demands and ensure that these demands can be met. See also Master Response S (Water Supply).

Response to Comment #235-12:
Comment noted. See response to comment #235-10 and #235-11. In addition, whether or not the Sonoma County Water Agency, as a water provider, decides to initiate preparation of an AB 3030 Groundwater Management Plan is up to the Agency, not Sonoma County. However, both the Agency and the County have cooperated with other entities to initiate groundwater management in the Sonoma Valley. See Master Response R (Groundwater Management).

Response to Comment #235-13:
The DEIR does not misinterpret SB 221 or SB 610. Rather it concludes that a project that would be large enough to trigger the SB 221 and SB 610 threshold in the unincorporated area is unlikely., Any project

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[4] Consultation with Dan McManus and John Woodling of the California Department of Water Resources on May 22, 2007.

[5] California's Groundwater-Bulletin 118 Update 2003, Department of Water Resources 2003, page 39, table 4.

that did exceed these thresholds would be required to provide verification from a local water purveyor that a sufficient water supply would be available. This verification would include normal, single-dry, and multiple-dry years within a 20-year projection. The supply would need to accommodate the projected demand in addition to existing and planned future uses, including agricultural and industrial uses. See Master Response O (SB 221 and SB 610).

Response to Comment #235-14:
See response to comment #228-10.

Response to Comment #235-15:
Section 4.9 (Public Services) of the DEIR discusses water supply and demand from all sources, including both surface water and groundwater. Section 6.2 (Cumulative Impacts) of the DEIR addresses the cumulative impacts of Draft GP 2020 land uses and development on water demand and supply from both surface and groundwater sources. The analysis of Hydrology and Water Resources in this section notes that "the cumulative development in the unincorporated area plus the nine cities would increase the demand on groundwater supplies, potentially affecting groundwater conditions". The section goes on to state that cumulative development would result in water resources impacts and that Draft GP 2020 "would make a cumulatively considerable contribution to these…impacts". See also Master Response R (Groundwater Management) and Master Response S (Water Supply). Although in the past, groundwater levels have declined in some parts of the South Santa Rosa Plain, this does not mean that a "cone of depression" exists under the City of Rohnert Park. None of the various studies or assessments of groundwater known to the preparers of the DEIR have described the groundwater conditions in this general area as a "cone of depression." See also response to comment #228-10.

Response to Comment #235-16:
Comment noted. However, the comment is not specific regarding the additional mitigation measures that should be included. In addition, the analysis in Section 5.0 (Alternatives) evaluates alternatives that include additional policies that would reduce water resource impacts further than under Draft GP2020.

Response to Comment #235-17:
The listing of impaired water bodies in Section 4.5 (Hydrology and Water Resources) has been updated in Master Response T (Listing of Impaired Water Bodies). The impacts of Draft GP2020 land uses and development on water quality are addressed in this section of the DEIR as well as the actions that are being taken and will be taken to address these issues. In addition, the Draft GP 2020 Water Resources Element includes several policies that address water quality impacts to surface waters. These include Policies WR-1a through WR-1p and WR-1v.

Response to Comment #235-18:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #235-19:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #235-20:
See response to comment #235-05. The comment identifies additional reports, studies, and letters that have been presented since the CAC completed its review and recommendation on the Draft GP2020 Water Resources Element. This information has been made available to the Planning Commission in its consideration of Draft GP 2020. However, since this additional information confirms the DEIRs statements regarding the uncertainty of groundwater conditions and water supply issues in Sonoma County as described in Section 4.5 (Hydrology and Water Resources) and 4.9 (Public Services), the conclusions of the DEIR would not be affected. See response to comment #235-05 and Master Response S (Water Supply).

Response to Comment #235-21:
The DEIR's conclusion that the Draft GP 2020 impacts on water quality for residential, commercial,

industrial, and public uses is less than significant relies not only the proposed policies, but also on current stormwater, grading, erosion and sediment control, and other regulations. The comment recommends additional mitigation measures in the form of policy revisions to further reduce Impact #4.5-1.

Policy WR-1m (Now WR-1o) has been revised to accomplish the same purpose. Proposed Policy WR-1n is already included as Policy WR-1a. Proposed Policy WR-1x is not within the authority of Sonoma County, as the County does not own or operate wastewater systems. However, Policy WR-4j addresses the quality and quantity of wastewater reused by public wastewater systems.

Proposed Policy WR-1y is addressed by Policies WR-1a, WR-1c, and WR-1e.

Response to Comment #235-22:
See response to comment #235-23 and #235-24.

Response to Comment #235-23:
Comment noted. See Master Response F (Explanation for Lack of Mitigation Measures).

Response to Comment #235-24:
Contrary to the comment, many of the policies on pages #4-9-30 and #4-9-31 would apply to all uses, including Draft GP 2020 Policies WR-2b and WR-3h, and other policies and programs discussed under Impact #4.5-5 (Groundwater Level Decline). The comment recommends several new or revised policies to address the impacts of Draft GP 2020 on water supplies in rural areas.

Proposed new Policy WR-1v would attempt to impose a mandate on an entity that is not under the jurisdiction of Sonoma County and is therefore infeasible. However, groundwater recharge areas may fit within the District's Acquisition Plan Category of "Natural Resources".

Proposed new Policy WR-1w to protect groundwater recharge areas is already accomplished by Policies WR-2a, WR-2e, WR-2h, and other similar policies.

Proposed Policies WR-2a, WR-2b, WR-2c, WR-2i, and WR-2f are not justified at this time; however, Draft GP 2020 includes the appropriate policies and programs in Section 3.2 of the Water Resources Element that are needed to accomplish the same purpose, particularly in locations where groundwater conditions warrant such management plans. See also response to comments #262-42, #262-43, and #262-45 and Master Response R (Groundwater Management).

Response to Comment #235-25:
The comment asserts that the proposed modification of Policies WR-5a and 5b would further reduce the impacts of potential water exports. Proposed Policy WR-5a would impose a requirement on surface water exports that is not within the jurisdiction of the County and is therefore is not feasible.

In addition, the proposed Policy WR-5b suffers from the same problem. Sonoma County does not have the jurisdictional authority to require that future surface water exports comply with the suggested standards. Furthermore, the proposed policy imposes restrictions on existing contracted exports, and therefore goes beyond CEQA requirements to address the potential impacts of the project in the future.

However, Sonoma County may have jurisdiction over commercial exploitation of groundwater, both for exports and for utilization within Sonoma County. In fact, the current Zoning Code requires a use permit for development of natural resources in some zoning districts. Therefore, a new policy is recommended to address these uses as follows:

> "Policy WR-5c: Where allowed by State law, require that groundwater not be exported off site for commercial purposes without prior discretionary approval by the County."

Response to Comment #235-26:
See Master Response G (Recirculation).

Response to Comment #236-01:
See response to comments #286-09 and Master Response M (Solid Waste Management).

Response to Comment #237-01:
See Master Response E (Extent of Significant Impacts).

Response to Comment #237-02:
See Master Response E (Extent of Significant Impacts).

Response to Comment #237-03:
See Master Response E (Extent of Significant Impacts). The comment does not specify where the standard of avoidance should be applied. However, a standard of avoidance for all groundshaking, for example, would be difficult to achieve, as most of Sonoma County is subject to some level of groundshaking and some existing built communities are subject to significant groundshaking. In these cases, the standard of avoidance is infeasible.

Response to Comment #237-05:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #237-06:
The purpose of the DEIR is to identify and address the environmental impacts of the land uses and development allowed by Draft GP 2020 under the proposed policies therein. It is the purpose of the DEIR to determine whether or not the impacts of these land uses and development under these proposed policies would be significant and to develop mitigation measures and alternatives that can feasibly avoid or reduce significant impacts while still meeting basic project objectives. Contrary to the comment, the DEIR did not take the approach that mitigation was infeasible because the proposed General Plan does not provide the mitigation; rather, a determination of "significant and unavoidable" indicated the opinion of the EIR preparers and County staff that no additional feasible mitigation measures were available beyond those either already identified in Draft GP 2020 or proposed in the DEIR. Impacts that have been determined to be significant in the DEIR may be reduced by additional or modified policies, should they be discovered and found to be acceptable and feasible.

Response to Comment #237-07:
See Master Response F (Explanation for Lack of Mitigation Measures).

Response to Comment #237-08:
The comment does not identify the impacts that could be reduced or policy revisions that would reduce these impacts. Accordingly, further response is not possible. However, it should be noted that many of the policies in the Draft GP 2020 Water Resources Element necessarily depend upon other jurisdictions to carry them out. For example, the Sonoma County Water Agency and all of its contractors are special districts and/or cities that are not under the jurisdiction of the County of Sonoma. Also, the DEIR identifies additional mitigation measures that have been presented to the Commission that would further reduce some impacts. See also Master Response F (Explanation for lack of Mitigation Measures).

Response to Comment #237-09:
See Master Response F (Explanation for Lack of Mitigation Measures) and Master Response E (Extent of Significant Impacts).

Response to Comment #237-11:
It is not feasible for Sonoma County and its General Plan to predict or determine what staffing and funding resources will be available over the period that the GP 2020 will be in place. In fact, one of the reasons why many of the impacts of Draft GP 2020 are anticipated to be significant and unavoidable is the uncertainty regarding the County's capacity to carry out the policies/programs. See Master Response E (Extent of Significant Impacts). Although the DEIR assumes that all policies will be implemented and all programs carried out between the time that the Plan is adopted and the year 2020, it is not possible to

determine when each program will be implemented. An example of this situation is raised by the comment's citing of public services. Section 4.9 (Public Services) of the DEIR identifies impacts such as #4.9-10, where lack of funding for emergency services is a factor in the conclusion that this will be a significant unavoidable impact. To the extent the comment refers to programs that are new to Draft GP 2020 (that is, not in the existing General Plan), the No Project Alternative analyzes the impacts that will occur if those programs are not implemented.

Response to Comment #237-12:
Mitigation measures that rely upon future programs to be achieved are not given as much weight in terms of impact reduction as those which take effect immediately upon adoption. As a result, the answer to the question in each instance depends upon the specific mitigation measure being applied and the level of impact reduction that was credited in the DEIR. See also Master Response E (Extent of Significant Impacts).

Response to Comment #237-13:
See also Master Response J (Buildout).

Response to Comment #237-14:
See also Master Response J (Buildout)

Response to Comment #237-15:
The infill residential capacity in urban areas is assumed to be full buildout at the maximum density allowed by the land use map plus an assumption for second units and other such units. Commercial and industrial infill is based upon an assumed square footage of structure as a percentage of lot size, with allowance for typical parking and landscaping, as well as consideration of the likelihood of multi story vs. single story use. The projected housing units are generally described in Section 3.0 (Project Description) of the DEIR and in the Draft GP 2020 Land Use Element, including City and unincorporated Planning Areas. Background data are available from PRMD reports to the CAC under the Issue Summary entitled "Population, Housing, and Employment Growth". See also Master Response J (Buildout).

Response to Comment #237-16:
The DEIR analyzes the Buildout Alternative in Section 5.0 (Alternatives). This alternative assumes a level of land use and development in the unincorporated area that is greater than under Draft GP 2020. One of the components of this assumption is a greater use of package treatment plants (see page # 5.0-10). The revised Policy PF-1l allows broader usage of package treatment plants than under Draft GP 2020. However, the impacts of the additional uses that could occur under this revised policy are addressed in the Buildout Alternative. In addition, while increased use of package treatment plants in rural areas may accommodate some growth that otherwise could not occur on standard septic systems, Draft GP 2020 Public Facilities and Services Element policies limit the use of these plants. Land Use Element policies also limit sprawl into the rural areas. Open Space and Resource Conservation Element policies protecting open space lands and Agricultural Resources Element policies supporting a viable agricultural economy also temper their potential growth-inducing impacts.

Response to Comment #237-17:
Since the Board of Supervisors directed that the land use designations in the existing General Plan not be considered for change, except under very limited circumstances (See criteria for land use amendment requests approved by the Board of Supervisors as part of the approval of the GP 2020 Work Plan, and since the primary factor in determining the projected future growth under Draft GP 2020 is the land use map, the amount of growth projected in the unincorporated county is fixed. As a result, there are no additional policies being considered that are designed to shift more growth to the cities. The fact that the percentage of unincorporated area growth would remain relatively unchanged in 2020 is due in part to a reduced rate of growth projected by the cities. See also response to comment #237-22 and Master Response I (Land Use Changes).

Response to Comment #237-18:
The DEIR did not consider impacts of traffic upon agricultural tourism as it is not an environmental impact

under CEQA guidelines. Weekend traffic modeling represents an unusual challenge because people have considerable flexibility in choosing routes, time of travel and destination, as contrasted with the weekday commute to and from work. Additionally, weather, time of year, and marketing exhibit considerable influence over destination choices for tourists, making it difficult or impossible to construct a mathematical model capable of generating a reliable, statistically significant prediction of the future weekend traffic patterns. Because of the extreme difficulty in modeling weekend traffic with existing technologies as well as a lack of data on how traffic congestion influences choices made by tourists, it is not feasible for the DEIR to consider how this traffic will affect tourism. See also Master Response K (Agricultural Traffic).

Response to Comment #237-19:
It is likely that all of the factors mentioned in the comment could contribute to the loss of agricultural land, but it is too speculative to identify a priority. The Draft GP 2020 Agricultural Resources Element contains the bulk of County policies to reduce such pressure. Section 4.8 (Agricultural and Timber Resources) of the DEIR reviews past actions and trends that contribute to the loss of agricultural land.

Response to Comment #237-20:
The text of Section 4.1 (Land Use, Population, and Housing) beginning on page #4.1-23 identifies the proposed changes in Urban Service Boundaries, which are the county's primary tool in avoiding sprawl and concentrating growth in urban areas. The impacts of proposed use of package treatment plants to meet future wastewater treatment demand are discussed in Section 4.9 (Public Services) under Impact 4.9-4. The potential growth inducing impacts of package treatment plants is discussed in Section 6.1 (Growth Inducing Impacts). The impacts of alternative Draft GP 2020 policies regarding the use of package treatment plants are discussed in Section 5.0 (Alternatives). Draft GP 2020 only allows use of Package Treatment Plants for uses consistent with the Land Use Plan, subject to restrictions regarding long term management. In addition, these systems may provide cost effective wastewater systems to water quality problems from older failing septic systems.

Response to Comment #237-21:
The DEIR analyzes the significance criteria listed on page #4-1.29. Impact #4.1-1 discusses the impacts of Draft GP 2020 on the growth and concentration of future population, including the provision of services and infrastructure capacity. This section makes the point that expansion of infrastructure is necessary to serve the projected growth in the Land Use Plan. However, this section does not say that infrastructure expansion, new land uses, and alteration of the intensity of existing uses will reduce growth. Rather, Impact #4-1.1 makes the point that, although the projected growth for the unincorporated area is relatively small, it will still require provision of services and infrastructure in order to serve it. The conclusion on page #4.1-35 is that Draft GP 2020 would reduce the potential for substantial growth in population. In addition, Section 6.1 (Growth Inducing Impacts) discusses the relationship between projected growth and the expansion of public services and infrastructure.

Response to Comment #237-22:
As noted on page #4.1-32, the projected increase in population in the unincorporated areas is 15% (19,064) between 2000 and 2020, while the total city and unincorporated area growth is 19% (87,416). Therefore, the actual population increase in the cities alone is 106,352. So just to maintain the percentage of city population at the 2000 level of 28% requires that the cities grow at over four times the rate that the county grows. In fact, the portion of city growth is projected to continue to increase at a much greater rate than that of the county, resulting in the County's percentage decreasing slightly from 28% to 27%.

Response to Comment #237-23:
The proposed changes to the County General Plan Urban Service Boundary (USB) for the cities are limited to bringing the boundaries into alignment with the cities' voter approved Urban Growth Boundaries (UGB). Canon Manor is already within Rohnert Park's UGB and the County General Plan's USB. The land use densities for these areas are shown in the Rohnert Park General Plan and the impacts of that growth were identified in the Rohnert Park General Plan EIR. In addition, because the Draft GP 2020 DEIR is a General Plan Program EIR, it addresses many impacts that are countywide in nature. For

example, the traffic model used for the transportation analysis includes future development in all of the cities as well as the unincorporated county area.

Response to Comment #237-24:
Draft GP 2020 contains many policies that limit the potential for urban sprawl, including Policies LU-2a, 2b, 3a, 3b, 3c, and 3d. However, since these policies apply to project applications that propose to increase development potential above what the existing land use plan allows, they are not intended to limit growth allowed by the General Plan. Similarly, policies supporting the use of package treatment plants are intended to accommodate growth allowed by the Plan rather than induce additional growth. Draft GP 2020 also includes policies that help to reduce the potential for recognition of certificates of compliance. However, state law limits the County's ability to control them completely. As such, the comment is correct that they represent a "wild card."

Response to Comment #237-25:
The Draft EIR identifies several impacts from agricultural processing and visitor serving uses in addition to Impact #4.1-3, including Transportation (Section 4.2), Air Quality (Section 4.3), Noise (Section 4.4), and Visual Resources (Section 4.11). These impacts (i.e. traffic, noise, dust, odors) generate complaints from neighbors. Since these uses tend to be large, often operate on weekends, and are common in rural areas, they generally result in more frequent compatibility issues than do other uses allowed by Draft GP 2020.

However, Draft GP 2020 also supports processing and visitor serving uses as essential for the protection of agriculture in the County. As a result, the Draft GP 2020 policies in the Agricultural Resources and Land Use Elements attempt to minimize future land use conflicts by reducing the potential for intrusion of residential development into agricultural areas. In addition, County Code requirements that a use permit be obtained for these uses enables decision makers to address compatibility issues on a site by site basis when and if they are raised by concerned neighbors.

Response to Comment #237-26:
The discussion on page #4.1-7 of the DEIR regarding growth pressures in California and in Sonoma County is not intended to be a detailed analysis of the specific land use categories that experience such pressure. Rather it is a general statement setting the foundation for the impact analysis in Section 4.1 (Land Use, Population and Housing). As a physically attractive county situated next to a major urban center in the Bay Area, pressure for growth in Sonoma County comes in many forms and affects all areas of the County. The statement pertaining to the shift in growth to rangelands and forests applies to California as a whole. In Sonoma County, the land values have resulted in the trend toward gentrification that is expressed in the following subsection on page #4.1-18 of the DEIR.

Response to Comment #237-27:
The source of information for the statement "the majority of rural home construction requires 20 to 600 acres per home" on page #4.1-8 is the same as in footnote 11 (Sonoma County's Countryside, a Destination for the Wealthy, Tom Chorneau and Matt Weiser, the Press Democrat, May 6, 2001).

Response to Comment #237-28:
The comment appears to question the land use compatibility impacts of increased use of package treatment plants in rural areas. However, it cannot be reliably predicted where or to what extent these plants might be utilized, particularly given the limitations on their use under Draft GP 2020 Policy PF-1l and the limitations on any uses in the rural areas under the Land Use Plan. It is also unclear where the use of these plants might have the greatest effect on neighbors in the unincorporated area, other than to speculate that the incompatibilities would be greater in areas where there were more neighbors that could be affected.

Response to Comment #237-29:
There are no comprehensive records of complaints received by the County, particularly those complaints that are not formalized in writing and followed up through the County's Code Enforcement procedures; these include complaints that are received only in verbal form as well as those that are addressed under

the County's Right-To-Farm provisions. As noted under Impact #4.1-2 and #4.1-3, the potential for complaints can be addressed in other ways as well. For example, County Code requires use permits for uses that typically generate compatibility problems, allowing decision makers to proactively address these issues.

Response to Comment #237-30:
See response to comment #237-29. Land uses that typically generate complaints require approval of a discretionary permit that can be conditioned or limited to avoid or reduce compatibility problems.

Response to Comment #237-31:
During its review of the Draft GP 2020, the CAC and Commission considered the potential for restricting agricultural processing and support uses to designated Urban Service Areas or to limited rural areas. These options were rejected for a number of reasons, such as the need for these uses to be in close proximity to agricultural production, the difficulty in accommodating sewage disposal needs on sewer systems in urban areas, and the increased potential for over-concentration of these uses. In fact, Draft GP 2020 includes Agricultural Resources Element Policy AR-5g that limits the potential concentration of these uses.

The DEIR, under Impact #4.1-3 (Incompatible Land Uses in the Rural Area), analyzes the compatibility impacts of these uses on a countywide scale. Although the specific location of the incompatibility might vary in concentrated locales, the overall extent of incompatibility would not likely be different. As a result, the DEIR's conclusion that these incompatibilities are significant and unavoidable would remain unchanged.

Response to Comment #237-32:
Since the clustering of agricultural processing facilities is not proposed in Draft GP 2020, the DEIR does not assess the impacts of that option, as noted in the response to comment #237-31. However, the impact on agricultural operations would depend upon the size and location of the clustered area. For example, too small an area would make it difficult for wineries to develop adequate wastewater disposal facilities. On the other hand, it might benefit product sales due to the potential for consumers to visit numerous tasting rooms in a short distance. Clustering would also be likely to increase traffic congestion, but increase the potential for customers to be shuttled from winery to winery.

Response to Comment #237-33:
Speed is one of the most common measures of effectiveness (MOE) for determining traffic level of service. When considering a given roadway distance, speed and travel time are just the reciprocal of each other, so in many ways represent the same MOE. For example, a one-mile section of highway traversed at 60 mph takes one minute. The same section traversed at half the speed (30 mph) takes twice as long (two minutes).

Safety would be another way to measure service levels. However, there are no widely accepted standards for doing so. The Federal Transportation Research Board (TRB) publishes a widely accepted methodology, called the Highway Capacity Manual (HCM), which had its last major update in 2000 (known as the 2000 HCM). The TRB is also developing, but has not released, a companion report to be known as the Highway Safety Manual. Work on that document had not even started when the Draft GP 2020 Sections begun. Copies of the 2000 HCM can be obtained from the TRB at www.trb.org, or by writing them at 500 Fifth Street, NW, Washington, DC 20001.

Response to Comment #237-34:
Most transportation planners ascribe the drop in Sonoma-San Francisco bus ridership as due to a series of service cuts necessitated by the Bridge District's financial problems, a decrease in the number of jobs in San Francisco, and a better jobs / housing balance in the North Bay. Because the intra-county and Marin commutes are shorter, have no toll charge, and generally no parking charge at the work-end, transit is not as competitive as it is for trips to San Francisco. Although there are Amtrak buses that connect with rail services at the Martinez Amtrak station, any comparison with that service would not be very meaningful for comparison with potential rail service in Sonoma County. Most of the Amtrak trips

using Sonoma County feeder buses are believed to be for non-commute purposes.

Response to Comment #237-35:
The number and location of potential future rail freight hubs are not known. It is also not know which commodities will be moved by rail, and if rail can compete efficiently with existing modes of transportation. Analysis of the impacts and benefits of freight hubs will be determined at the project level by the public agency responsible for rail freight service, the North Coast Railroad Authority (NCRA).

Response to Comment #237-36:
Draft GP 2020 Circulation and Transit Element Figure CT-3, and Policies CT-3a and CT-3b establish objective criteria regarding LOS thresholds for the countywide road system. Section 4.2 (transportation) of the DEIR under Impact #4.2-1, #4.2-2, and #4.2-3 describes the reasons why mitigation for traffic impacts may not be feasible or desirable, resulting in congestion that is worse than LOS C. These reasons include lack of funding, lack of community support, preference from traffic calming, and other impacts of road improvements. The criteria in Policies CT-3a and CT-3b are based upon the growth projected in the General Plans of the County and all of the Cities. Due to the impact of the growth in the Cities on the County transportation system, the only mitigation available to reduce much of the projected congestion is the construction of improvements.

Response to Comment #237-37:
See response to comment #237-33. Although measures of safety are being developed as a performance measure comparable to level of service, there is no widely accepted standard at the present time. See "Ongoing Development of a Highway Safety Manual," by Geni Bahar and Margaret Parkhill, ITE Journal, August 2006, pp. 22ff.

Response to Comment #237-38:
The traffic impacts of Draft GP 2020 land uses and development, including projected residential, commercial, agricultural, and other uses, within the unincorporated area of the County are addressed in Section 4.2 (Transportation) of the DEIR. The impacts of a greater level of development are addressed under the Buildout Alternative in Section 5.0 (Alternatives). This alternative assumes, among other things, an increased reliance upon package treatment plants and greater incidence of ACC lots than under the Draft GP 2020 level of development. See Master Response J (Buildout).

Response to Comment #237-39:
The No Project Alternative and the Buildout Alternative assume that transportation improvements would be limited to those with funding currently available. As described in Section 5.0 (Alternatives) in Exhibit #5.0-2, the transportation impacts of these two alternatives are greater than under Draft GP 2020.

Response to Comment #237-40:
An increase in the capacity of a roadway will likely result in an increase in the amount of traffic using that roadway and a decrease in the traffic impact measured by the level of congestion.

Response to Comment #237-41:
The Draft GP 2020 Circulation and Transit Element no longer proposes to extend Llano Rd to the north.

Response to Comment #237-42:
These policies are proposed as feasible mitigation measures, at a General Plan Program EIR level, for the traffic impacts of Draft GP 2020. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #237-43:
This comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The decision as to what constitutes environmental or community values would be made by the applicable decision making body as part of the project review process.

Response to Comment #237-44:

Many of the freeway ramp merge and diverge areas were designed based on standards and volumes present in the 1950s, and consequently do not meet current standards and traffic volumes. Caltrans has improved many of the ramp areas, and will continue to do so when the various sections of US 101 are widened. The reference to the earlier study is not specific enough to compare its results to the Draft GP 2020. Ramp improvements will generally improve safety, and reduce that amount of turbulence in traffic on the mainline. However, they are not likely to increase capacity enough to meet the demands of the future population and employment in Sonoma County, and therefore were not considered as an alternative on their own. Draft GP 2020 Policy CT-3g supports consideration of ramp metering and similar measures.

Response to Comment #237-45:
See Master Response D (Effectiveness of Mitigation Measures). Transit improvements are expected to play an increasing role in reducing congestion in the Draft GP 2020 Circulation and Transit Element. The policies and programs in this element are only as effective as the available funding to provide the services. The Sonoma County Transportation Authority has the primary responsibility for allocation of available funds.

Response to Comment #237-46:
The DEIR utilized the BAAQMD thresholds of significance for a General Plan, which are based on consistency with regional air plans and compliance with regional strategies and programs rather than predictions of future air quality. The DEIR therefore does not provide any quantitative predictions of future air quality for the Santa Rosa Plain, Forestville, airport, Dry Creek or any other portions of the county. Based on the latest regional air quality plan (i.e., the BAAQMD's 2005 Bay Area Ozone Strategy) air quality in Sonoma County will continue to gradually improve over time for ozone and particulate matter, which are the major air quality problems in the region, assuming that the region continues to implement the measures recommended in the Plan.

Response to Comment #237-47:
Current projections of countywide wood burning emissions through 2020 forecast a slight reduction of particulate emissions over time. These emissions forecasts are not only affected by future population growth but by trends in types of wood-burning devices. Wood-burning stoves are inherently more efficient than open hearth fireplaces, and are also subject to federal emission standards, and older, more polluting wood stoves will gradually be replaced over time by Certified EPA Phase II wood stoves.

While there have not been any recent new regulatory programs adopted for wood smoke in the region, the BAAQMD has recent expanded its current voluntary "Spare the Air Tonight" program to reflect recently adopted more stringent air quality standards for particulate matter. The projections of wood burning are based on past and current home heating practices, and do not account for any effects of future rises or declines in energy prices. In addition, the County has recently adopted an ordinance expanding its woodstove regulations to the area under the jurisdiction of the BAAQMD.

Response to Comment #237-48:
The need for future wastewater treatment plants is identified as a public services impact in Section 4.9 (Public Services) of the DEIR, Impact #4.9-5. Since the specific nature, location, and intensity of the facilities cannot be determined at this time and since Sonoma County would probably not be the entity which proposed and operated the plant, it is not possible to identify its impacts. However, since these facilities are part of the land uses and development anticipated under Draft GP 2020, the impacts are identified at a program level as part of each topical section of the DEIR.

Similarly, a water treatment facility for water supply from Lake Sonoma has not been proposed, identified, located, or analyzed, other than for general contingency planning purposes by the Sonoma County Water Agency. As such, its impacts cannot be determined or addressed at this time.

Response to Comment #237-49:
As noted in the response to comment #237-48, specific wastewater treatment/disposal projects such as the Geysers Wastewater Project have been undertaken by entities other than the County of Sonoma. The

detailed impacts of past and future projects have been and will continue to be addressed at the time that they are proposed by those entities and subjected to environmental review. Speculation as to what action the recipients of wastewater will take is beyond the scope of the DEIR.

Response to Comment #237-50:
See Master Response D (Effectiveness of Mitigation Measures). The Bay Area Air Quality Management District submitted a comment letter regarding this DEIR (see comments #8-1 through #8-8) and did not identify any concerns regarding the use of words such as "support" and "encourage." Indeed, in comment #8-3, the District proposes additional policies to further reduce air quality impacts. These policies also use words such as "support" and "promote."

Response to Comment #237-51:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The decision as to the appropriate mitigation measures for a particular project would be determined by the applicable decision-making body for the project.

Response to Comment #237-52:
The accuracy of traffic noise predictions is limited by the availability of data. In general, traffic noise modeling can be accurate to within 1.5 dB, which is consistent with the required end-to-end accuracy of survey-type noise measurement systems. For most roadways, the most significant variable over time is traffic volume. Factors such as day/night traffic distribution, truck mix and speed tend to remain constant unless there are significant changes in land use or in the roadway itself (adding lanes, etc.). A change of about 25 percent in traffic volume is required to generate a one (1) dB change in the traffic noise level at a given receiver; this degree of change is considered imperceptible. Therefore, as long as there are no significant changes in land use or roadway configuration (either of which would be subject to further environmental review), slight inaccuracies in traffic volume projections would have minor (likely imperceptible) effects on the accuracy of the noise level predictions.

Response to Comment #237-53:
The noise measurements described on pages #4.4-5 through #4.4-7 were intended as surveys of noise levels at nearby receivers, or at the nearest point that allowed measurements without interference. As such, these data provide only indications of the fact that similar noise sources could be or not be of possible concern in the land use planning process. The measurement data also serve as triggers for appropriate noise studies if noise sensitive land uses are proposed near these or other similar sources. In addition, the measurements serve as triggers for specific review of similar projects proposed in Sonoma County. Specific land use proposals involving similar noise sources or noise sensitive uses in the vicinity of the identified uses would require detailed noise studies as part of subsequent environmental review.

Response to Comment #237-54:
Increased railroad noise is addressed in Section 4.4 (Noise) of the DEIR. The SMART passenger rail project EIR addresses the specific noise impacts of that project.

Response to Comment #237-55:
Where atmospheric effects create problems, the concern is usually whether those conditions will occur on a frequent basis, as people tend to accept occasional noise events that are beyond the control of the noise producer. Frequently occurring atmospheric conditions that can cause problems, such as nighttime inversions, would be addressed by subsequent environmental review of specific projects. Local residents having knowledge of such conditions would be well served by advising County decision makers of their concerns during the project permitting process. Draft GP 2020 Policy NE-1c addresses noise impacts from new projects.

Response to Comment #237-56:
It appears that this comment addresses the discussion of noise at the Healdsburg Transfer Station. Subsequent to preparation of the DEIR, Sonoma County conducted an environmental review of noise and other effects of changes in the transfer station design. In the noise studies for that project, it was found

that noise from tipping floor operations was not audible at the residence immediately north of the project access road, but that noise from trucks entering the site was audible. However, the Noise Element standards in Table NE-2 were not exceeded at that residence.

The City of Healdsburg has been processing a land development proposal (the Saggio Hills Project) for the property immediately south of the transfer station. Noise measurements were conducted on that property for the above-mentioned transfer station project. Although back-up alarms were audible at that site, noise levels did not exceed the standards of Table NE-2. The Draft EIR for the Saggio Hills Project states that the proposed residential uses would be located in a noise environment below 60 dBA CNEL, which is the city of Healdsburg's standard.

Response to Comment #237-57:
The locations of the noise measurement sites that provided the data for Exhibits #4.4-4 through #4.4-11 are described in more detail by Figure #4.4-3, and are shown on Exhibit #4.4-2 in the DEIR.

Response to Comment #237-58:
The DEIR concludes that significant impacts are likely to occur related to increased traffic noise levels along approximately 20 roadway segments in the County. Impact #4.4-1 was found to be significant and unavoidable, even with the implementation of policies in the Noise Element, such as NE-2b (sound walls and other noise attenuation). In regards to the location of new noise sensitive land uses within the 20 noise impacted roadways, the DEIR concluded that the numbers of such new noise sensitive uses which would be significantly impacted would be insubstantial, and therefore the impact would be negligible. Most new development in these areas would be subject to discretionary and environmental review and would be subject to Noise Element policies. These policies provide for an Acoustical Analysis which would include mitigation measures to reduce noise to acceptable levels (Policy NE-1d), avoidance of new uses in noise impacted areas unless mitigation measures are included (Policy NE-1b), and the use of sound walls or similar attenuation (Policy NE-2b). Noise sensitive multiple occupancy projects that do not require a discretionary permit would be required to comply with Title 24 Building Code regulations. These regulations require interior noise levels to be reduced to 45 dBA Ldn (Policy NE-1g). Land uses that would not be subject to environmental review are mostly limited to small projects such as single residences on existing lots. These are frequently set back from roadways in order to meet Scenic Resource setbacks. These setbacks would reduce noise impacts at the noise sensitive land use. Additionally, there is a relatively low level of development potential on unincorporated lands with roadway frontage, because the majority of such lots have been developed and the County has generally not been amending the land use map to increase development potential in unincorporated areas since the 1989 General Plan was adopted.

Response to Comment #237-59:
The noise impacts of future commercial airline services at the Sonoma County Airport are analyzed in Section 4.4 (Noise) of the DEIR. The DEIR is based upon the Year 2010 noise contours calculated for the Sonoma County Comprehensive Airport Land Use Plan (CALUP). The CALUP 2010 forecasts are based upon certain aircraft fleet mixes and numbers of flights as specified in the CALUP for each airport. For this reason, Draft GP 2020 includes a program (Air Transportation Program #3) to notify the ALUC that an update of these projections and noise contours may be necessary at such time that airline service approaches the ALUC projections. It should also be noted that the update of the Airport Master Plan currently in progress will likely result in a new forecast for airline service and new noise contours that will be subject to ALUC review.

Response to Comment #237-60:
The DEIR assesses Aircraft Noise in Section 4.4 (Noise) under Impact #4.4-5. The Draft GP 2020 Policy AT-3b restricts night time operations to aircraft which do not exceed a single event noise level of 72 dBA (Lmax). Such restrictions reduce impacts related to sleep disturbance.

Response to Comment #237-61:
Repetitive loss properties, as defined by FEMA, are residential buildings that have experienced four or more paid flood losses of more than $1,000 each, two paid flood losses within a 10-year period that

together equal or exceed the current value of the insured property, or three or more paid losses that together equal or exceed the current value of the insured property.

The locations of repetitive loss properties as of 2003 were plotted in the Sonoma County Hazard Mitigation Plan. Properties on this list can change over time as new properties qualify. Many of the repetitive loss properties are within the mapped 100 year floodplain. However, approximately 34 percent were located outside of the current 100 year floodplain.

Response to Comment #237-62:
Draft GP 2020 Policy OSRC-11a calls for designing discretionary projects so that roads are not located on slopes over 30%. This would apply to all roads for any use requiring a discretionary permit. It would not apply to roads for projects requiring ministerial review, such as driveways for single family homes. However, as noted under Impact #4.5-2 of the DEIR, the County's existing regulations for grading, fire safety, stormwater runoff, etc., provide mitigation for these issues.

Response to Comment #237-63:
The County's existing NPDES program requires that grading associated with building permits address erosion, sedimentation, and other stormwater pollutants. In addition, Draft GP 2020 Policies WR-1h, WR-1j, and other polices provide additional mitigation for these erosion and sedimentation problems

Response to Comment #237-64:
The comment does not pertain to the adequacy of the DEIR. As with any other water storage reservoir like Lake Sonoma, storage capacity is reduced by the accumulation of upstream sediment flowing into the lake over time. In fact, such reservoirs are designed to accommodate a certain amount of sediment in addition to the design water storage. If sediment loads exceed that design, the planned water storage capacity would be reduced.

Response to Comment #237-65:
There is a large opportunity to reduce erosion and sediment yield to streams in Sonoma County through better road right-of-way management, which really involves better maintenance and management of steep, barren, eroding road cuts. Management opportunities also exist to reduce road-related erosion and sediment yield on unpaved roads, including county roads, private roads, and utility and farm and ranch access roads, and in some areas, old logging roads.

There is, however, a high cost to develop and implement such a program, especially in steep hilly areas where soil creep and landsliding contribute to maintenance problems. Considering that it currently is difficult to adequately fund maintenance of paved public roadway sections, such a program would need to identify and prioritize the watershed areas for the best use of public funds, based on roadway impacts to beneficial water resources. This identification / prioritization approach has been used in other watersheds in other counties, and has been effective. Some of the roadway watershed planning and implementation work has been funded by Clean Water Act, and other funding earmarked for fisheries enhancement. In the future, this approach may be an important component of the 303(d) planning efforts. Draft GP 2020 Policies WR-1a, WR-1b, WR-1g, etc provide support for addressing these issues.

Response to Comment #237-66:
Though individual flood and storm events vary as a general observation, the 3 to 4 duration still holds true. As weather and flooding patterns are observed over time, flood maps and data are adjusted accordingly.

Response to Comment #237-67:
The referenced line is deleted from page #4.5-8 of the DEIR.

Response to Comment #237-68:
Comment noted. The section of the DEIR that identifies impaired water bodies has been updated to reflect the most recent EPA approved list and now includes the Laguna de Santa Rosa. See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #237-69:
See Response to Comment #237-68.

Response to Comment #237-70:
See Master Response R (Groundwater Management).

Response to Comment #237-71:
This comment is not related to the adequacy of the DEIR. However, whether of not FEMA remains an agency of the federal government may not matter as much as whether or not the Federal Flood Insurance Program is continued. It is this program that provides the technical identification of areas subject to flooding. If the federal program were to disappear, local and/or state governments would need to find a way to identify and monitor areas subject to flooding without federal assistance.

Response to Comment #237-72:
Draft GP 2020 policies included in the Water Resources Element, such as Policies WR-1e, WR-1g, and WR-1h, in addition to existing regulations, will address this impact. The cumulative impact of all Draft GP 2020 land uses and development on water resources is addressed in Section 6.2 (Cumulative Impacts) under "Hydrology and Water Resources". The water resources impacts of each of the alternatives are identified in Section 5.0 (Alternatives) of the DEIR.

Response to Comment #237-73:
The study of Sonoma Valley has led to the initiation of a groundwater management plan for the valley. The study of Alexander Valley has been completed and has not resulted in the need for further management actions at this time.

Response to Comment #237-74:
The DEIR addresses the water quality impacts of Draft GP 2020 resulting from agricultural processing and support uses under Impact #4.5-2. The Draft GP 2020 allows industrial uses only on lands designated as General Industrial or Limited Industrial and not on agricultural lands.

Response to Comment #237-75:
Policies that support and encourage coordination among agencies responsible for addressing water quality issues and educate the public about protecting water quality are the only effective means of influencing the activities of agencies not under County jurisdiction and of existing and future residents who are not subject to regulatory requirements. In fact, in Sonoma County, such programs are probably more effective in the long run than regulatory requirements due to the fact that most of the land uses and development in the County already exist. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #237-76:
Use of groundwater wells can influence groundwater flow and cause movement of plumes. In fact, so-called pump and treat systems that are implemented to deal with groundwater contamination can also cause local changes in groundwater gradient and flow direction. Often these are in more urban areas where water supply is not reliant on local groundwater, or where only a shallow or perched groundwater zone is impacted, not a deeper zone where well water is drawn. However, such plumes as the one underlying parts of the downtown area of Santa Rosa and Roseland are monitored by the Regional Water Quality Control Boards. New wells in these areas are restricted. On a countywide and long term basis, increased reliance on groundwater for at least peak needs or as a drought contingency water supply would mean that identifying and correcting contaminated groundwater problems will be an increasingly important issue for both local private wells and municipal supply wells. Exposure to hazardous materials is addressed in Section 4.13 (Hazardous Materials) of the DEIR. Section 5.3 of the Draft GP 2020 Public Safety Element provides policies for the reduction of hazardous materials.

Response to Comment #237-77:
As noted in Master Response D (Effectiveness of Mitigation Measures), mitigation measures involving

future programs may take several years to complete, depending upon availability of funding, staffing, and program priorities set by the County. As a result, this uncertainty causes the level of impact reduction for such programs to be less than it would be if the program were put in place immediately upon adoption of the General Plan.

Response to Comment #237-78:
Policy WR-1g requires the County to minimize discharge of sediment and pollutants into water. See also response to comment #237-77 and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #237-79:
Policies WR-1c, WR-1d, WR-1e, and WR-1f are credited as mitigation measures under Impact #4.5-1. However, the extent of impact reduction is relatively small since the implementation of these policies is dependent upon future regulatory measures that are subject to imposition or approval by other jurisdictions, particularly the Regional Water Quality Control Boards.

Response to Comment #237-80:
Yes, as noted in response to comments #237-77, #237-78, and #237-79, as well as Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #237-81:
As noted in the response to comments #237-77, #237-78, #237-79 and #237-80, the credit for impact reduction for these policies is less for policies that rely upon uncertain future implementation by the County or upon actions by other jurisdictions. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #237-82:
Draft GP 2020 proposes to address the water quality impacts of agriculture in several ways. Most vineyards come under the auspices of the Vineyard and Erosion Control Ordinance. In addition, Draft GP 2020 addresses water quality impacts from agriculture in such policies as OSRC-8b, OSRC-8d, WR-1a, WR-1c, WR-1e, WR-1j, and WR-1i.

Response to Comment #237-83:
The comment does not pertain to the adequacy of the DEIR. Soil loss is a function of a number of variables, including slope steepness and slope length, rainfall intensity, protective vegetative cover, and employment of erosion control practices. Soil loss can be predicted for various land uses and slopes at the project level, using the Universal Soil Loss Equation. See also response to comment #6-08. In addition, Policy WR-1j, in combination with the existing VESCO ordinance, address water quality impacts from agricultural uses.

Response to Comment #237-84:
The amount of soil stabilization and/or erosion depends upon a combination of many factors, including rainfall rate and amount, soil conditions, etc. Seasonal and year round soil stabilization measures are frequently applied to many land uses and development related to agricultural and resource uses, including vineyards, mining operations, timber harvests, etc., as these uses come under existing erosion control regulations.

Response to Comment #237-86:
Draft GP 2020 Policies WR-4a through WR-4o listed under Impact #4.5-4, which are credited with reducing water quality impacts resulting from wastewater disposal, include a full array of measures, both mandatory and discretionary. For example, note that Policies WR-4b, WR-4e, WR-4g, and WR-4j are mandatory for new development. While there may be substantial water quality impacts occurring as a result of less effective wastewater disposal systems in the past, current regulations and proposed policies would result in less than significant water quality impacts for future development.

Response to Comment #237-87:
See Master Response R (Groundwater Management) and response to comment #262-18.

Response to Comment #237-88:
Throughout the analysis in this subsection of the DEIR (Impact #4.5-5), the lack of adequate data to fully assess groundwater conditions in Sonoma County is noted. The Groundwater classification system currently in use (See page #4.5-19 for a description) provides general boundaries for the four areas of groundwater availability and is the best source of information available for this purpose. As provided in Draft GP 2020, more and better data are needed in order to improve the overall understanding of groundwater conditions in general and to obtain additional data necessary to improve the accuracy of these maps. See also Master Response R (Groundwater Management).

Response to Comment #237-89:
The statement on Page #4.5-5 of the DEIR that the majority of groundwater recharge occurs along streams refers to areas of high clay content or hard bedrock. As the text goes on to explain, there are many other recharge areas along valley floors and in volcanic rock formations. Nonetheless, the comment makes an important point that recharge areas need to be protected. The DEIR identifies policies in this section that would directly protect these areas, such as Policy WR-2f, and policies that will increase the County's understanding of groundwater conditions and recharge rates along streams so that more specific and effective mitigation measures can be formulated and utilized on a project-specific basis.

The DEIR preparers are not aware of any current or planned projects to export groundwater. However, should a water provider propose such a project, the impacts would be addressed at the time by the lead agency making the proposal. See response to comment #235-25.

Response to Comment #237-90:
The DEIR does not conclude that the lesser requirements for review of projects in Class 1 and 2 areas contribute to a significant cumulative impact. Rather, it concludes that the uncertainty regarding groundwater conditions in the County makes it unclear whether or not declines in groundwater levels will occur. See also Master Response R (Groundwater Management).

Response to Comment #237-91:
Section 4.5 (Hydrology and Water Resources) of the DEIR concludes that saltwater intrusion would be a less than significant impact due to the limited development potential allowed by Draft GP 2020 in the areas of the County near saltwater bodies. The Draft GP 2020 Water Resources Element recommends Policies WR-1t and 1u which would take advantage of environmental assessments and permit review processes to determine where and under what circumstances saltwater intrusion has or is occurring and, if appropriate, to determine the appropriate management action to address it.

Response to Comment #237-92:
According to Agency staff (Pamela Jeane; personal communication), around 2000 the Agency converted its three wells in the Santa Rosa Plain from emergency use to regular water supply, as permitted by the California Department of Health Services. This usage, which is reflected in both the 2000 and 2005 Urban Water Management Plans, was taken into account in the analysis of groundwater supplies in the DEIR. Increased pumping of groundwater by the cities may or may not reduce groundwater levels over time. However, without sufficient data regarding the available storage, the rate of recharge, and the cumulative demand on the applicable basin, it is not possible to determine the impact on groundwater levels. The DEIR makes this point in its discussion under Impact #4.5-5.

Response to Comment #237-93:
See response to comment #237-92.

Response to Comment #237-94:
See response to comment #237-89.

Response to Comment #237-95:
The DEIR does not "dismiss" any impact associated with saltwater intrusion. Rather, it concludes that the impact is not significant at a General Plan /Program EIR scale. Examination of the specific causes of

saltwater intrusion on each parcel or well is not possible or appropriate at the General Plan level of analysis. The Draft GP 2020 includes the appropriate policies and programs that would address this issue as part of project analyses or basin wide studies in the areas where saltwater is present.

Response to Comment #237-96:
Though current flood maps may not represent existing flood plain areas with 100 percent accuracy, they are still useful and represent the best available information. The FEMA maps are periodically updated to incorporate changes noted from past floods. The Sonoma County Hazard Mitigation Plan indicates a high priority for working with FEMA to update flood studies and for participating in FEMA's Map Modernization Program. See also response to comment #237-66.

Response to Comment #237-97:
The comment does not pertain to the adequacy of the DEIR. It appears to refer to Policy PS-2e related to the adoption of a countywide "No-Net Fill" ordinance. The details of the ordinance and any exemptions that may be contained therein would be determined at the time the ordinance is adopted, as the General Plan is a general policy document and not always the appropriate location for ordinance language.

Response to Comment #237-98:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Policy PS-2d calls for the development of a long term plan to reduce repetitive loss properties. Given the amount of flood damage incurred by repetitive loss properties, Policy PS-2d is intended to help prioritize and focus the County mitigation efforts on these high risk properties which are both within and outside of the plotted 100 year flood plain. Use of repetitive loss properties instead of FEMA designated flood plain maps would not be effective at identifying flood hazard areas, since the only properties that would be included are those whose owners chose to file claims. See also response to comment #237-61.

Development on Administrative Certificate of Compliance (ACC) lots would be subject to current codes and be elevated one foot above the 100 year flood plain.

Response to Comment #237-99:
Detailed studies of specific uses and groundwater demands by use and area are not practical or feasible for a countywide General Plan level of detail (see Master Response C Program EIR/Level of Detail). Instead, the Draft GP 2020 groundwater policies propose a strategic approach designed to determine groundwater conditions and use patterns in each area of the County. This approach would support the type of studies that the comment recommends. In the meantime, the DEIR acknowledges the lack of current technical understanding of such conditions and, as a result, concludes that a significant impact on groundwater levels may occur. See also Master Response R (Groundwater Management).

Response to Comment #237-100:
Draft GP 2020 does not propose to reduce Russian River flows, nor does any Agency responsible for Russian River water use. Since the flow levels are subject to the regulation of the US Army Corps of Engineers under the provisions for operation of flood control and water supply facilities at Lake Mendocino and Lake Sonoma, any proposal to reduce or modify these flows below currently specified minimum requirements would be evaluated by that Agency. In addition, proposed flow reductions may also fall under the jurisdiction of the State Water Resources Control Board if they involve additional water rights. In any case, such proposals would include environmental review of the impacts of the reduction on groundwater and wells. Nonetheless, a reduction in Russian River flows could contribute to less recharge of groundwater in the vicinity of the river, thereby exacerbating the significant and unavoidable impact on water supply identified in Impact #4.9-2, at least for rural residential and agricultural users that rely on groundwater near the river.

Response to Comment #237-101:
The impacts of Draft GP 2020 land uses and development on future water supplies is addressed in Section 4.9 (Public Services) of the DEIR under Impact #4.9-1 and #4.9-2 and in Section 4.5 (Hydrology and Water Resources) under Impact #4.5-5 (Groundwater Decline). The implications of reduced water availability of water during drought or other impaired conditions with respect to the Russian River System

are also discussed in the response to comment #7-01. The impact of drought on rural well users is much less clear, as groundwater conditions in each area of the County differ. In any event, the key mitigation measures in Draft GP 2020 that address the lack of water during these periods are related to master facility planning and conservation. In addition to these measures in Draft GP 2020, there are additional policies recommended in response to comment #7-02 and #7-03 that will further increase the potential for demand reduction through conservation.

Response to Comment #237-102:
Issues associated with irrigation with reclaimed wastewater are addressed in Impact #4.5-4 and include the accumulation of nutrients, especially phosphorus, low levels of heavy metals, and salts and sodium in soils. Because of rainfall amounts in Sonoma County, and consequent leaching, salt buildup is not usually significant. Over-irrigation and consequent runoff of irrigation-applied wastewater can also deliver these and other low level contaminants to area waterways. With good irrigation management, irrigation runoff can be largely prevented.

Over a long period, the shallow groundwater zone can be affected by soluble salts and nutrients and other contaminants contained in wastewater, although this can be minimized with good irrigation and crop management. The accumulated metals, nutrients, and salts, which are attached to soil particles, can also be transported to area waterways through soil erosion and sediment transport processes. Again, this can be largely eliminated by good erosion control and land management practices; policies identified under Impact #4.5-4 support these practices.

Response to Comment #237-103:
CEQA does not require cost predictions as part of an EIR. All impacts of package treatment plants will be reviewed at the time of project review. All package treatment plants are required to have a financial plan and closure agreement. The permitting authority for these facilities is the applicable Regional Water Quality Control Board pursuant to the Board's Basin Plan. On a cumulative basis, package treatment plants are typically beneficial from a water quality protection perspective, particularly where they replace failing septic systems. See also response to comment #237-28.

Response to Comment #237-104:
The impacts of Draft GP 2020 land uses and development on groundwater levels are discussed in Section 4.5 (Hydrology and Water Resources) under Impact #4.5-5 and Section 4.9 (Public Services) under Impacts #4.9-1 and #4.9-2.

Response to Comment #237-105:
As discussed in the DEIR, urban development could have significant secondary effects on streams and rivers, affecting stream stability. Increased runoff, including changes in annual peak flows can cause a channel to down-cut and erode, resulting in channel bank failure. The conversion of upland open space areas and farmland to urban lands can also change the sediment budget to area creeks, again potentially resulting in areas of sediment accumulation, or channel down-cutting and bank erosion.

The issue is complex and difficult to predict. It would require a separate countywide watershed assessment and hydrologic and geomorphic analysis in order to understand and attempt to quantify. This is being completed in Ventura County, as the commentor notes, and Ventura County is developing stream management and hydraulic design guidelines and stream, water quality, and watershed protection strategies. The effect on stream stability crosses boundaries between cities and county unincorporated areas, and is therefore best dealt with on a watershed scale. This cooperative watershed approach would is supported by Draft GP 2020 Policies WR-1a and Section 3.6 of the Water Resources Element.

Response to Comment #237-106:
Comments on the DEIR were received from both Regional Water Quality Control Boards with jurisdiction in Sonoma County. Neither comment letter specified that their comments were limited to their jurisdiction.

Response to Comment #237-107:
The comment pertains to a policy issue in the Draft GP 2020 and does not pertain to the adequacy of the

DEIR.

Response to Comment #237-108:
The comment does not pertain to the adequacy of the DEIR. CEQA does not require that an EIR address the economic impacts of the project. However, the protection of agriculture in Sonoma County depends upon support for the full range of agricultural uses, including production and support uses.

Response to Comment #237-109:
This comment does not relate to the adequacy of the DEIR.

Response to Comment #237-110:
The reliability of water resources to meet the demand from the Russian River System is discussed in Section 4.9 (Public Services) and Impact #4.9-1. See also Master Response Q (SCWA Water Project) and Master Response S (Water Supply).

Response to Comment # 237-111:
The impacts of any proposal to amend the ARM Plan to expand terrace mining extraction would be addressed as part of the specific proposal. At the present time, the only proposal being considered is one that would extend the time period for an existing permitted operation rather than expand the area or amount of gravel extracted.

Response to Comment #237-112:
The actual number of acres cannot be determined without exhaustive studies of approximately 3,500 miles of streams in Sonoma County. The number is affected by many factors, including the width of each channel, the location of bank, the topography of adjacent land, as well as the various regulatory provisions applicable to uses within the setback. The DEIR uses a conservative approach to this calculation so as not to underestimate the acreage and the impact.

Response to Comment #237-113:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Policy OSRC-7b (3) provides guidance for the contents of a site assessment and is not intended to address the impacts of an individual project. The policy has been deleted by the Planning Commission as being too detailed for a General Plan policy.

Response to Comment #237-114:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Policy OSRC-7c has been modified to apply only to discretionary projects.

Response to Comment #237-115:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Notification will assist in assuring that applicants obtain necessary permits. The policy does not mean that further site assessment would not occur.

Response to Comment #237-116:
The cumulative impacts of Draft GP 2020 land uses and development on habitats are discussed in Section 4.6 (Biological Resources). The cumulative impacts of development and uses under Draft GP 2020, in combination with city development and other identified cumulative projects, are addressed in Section 6.2 (Cumulative Impacts) of the DEIR.

Response to Comment #237-117:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Existing mapping relies upon soils conducive to valley oaks. Policy OSRC-7n is intended to increase the protection of these habitats rather than improving the mapping. OSRC Program 16 providing for a comprehensive habitat mapping of the County would lead to an improved knowledge of habitat conditions that could result in changes to the areas appropriate for valley oak protection.

Response to Comment #237-118:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The values are defined in the policy.

Response to Comment #237-119:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Policy OSRC-8c (13) has been deleted by the Planning Commission.

Response to Comment #237-120:
The DEIR assumes that the Draft GP 2020 policies and programs will be followed and implemented. If Program #7 to develop outdoor lighting standards is not implemented, Policies OSRC-4a, OSRC-4b, and OSRC-4c would still be in effect and would reduce visual impacts related to lighting and glare. The No Project Alternative is Section 5.0 (Alternatives) of the DEIR does not include new lighting and glare policies. Under this alternative, impact #4.11-3 would be greater than under the Draft GP 2020.

Response to Comment #237-121:
Water quality monitoring is carried out by the applicable Regional Water Quality Control Boards. Sonoma County could track and report this monitoring data as part of its indicators and monitoring program under Objective LU-1.6 and Policy LU-1f.

Response to Comment #237-122:
The SCWA Urban Water Management Plan addresses future water demand and supply under both normal and low flow periods. The DEIR considers the uncertainty of Agency supplies in concluding that Impact #4.9-1 is significant and unavoidable. See response to comment #235-03 and Master Response P (Urban Water Management Plans).

Response to Comment #237-123:
The Eel River diversion is discussed in the introductory chapters of Section 4.9 (Public Services) under Water Supply Services- Environmental Setting. The uncertainty regarding the approval of the SCWA's Water Project is accounted for in the analysis of Impact #4.9-1 (Insufficient Water Supplies to Meet Future Demand of the Urban Service Areas). It should be noted, however, that most of the demand for Russian River System water is from the cities and Marin County, and not from unincorporated Sonoma County.

Response to Comment #237-124:
The goal of reducing dependency upon groundwater can only be achieved if water suppliers work together with private water users to live within the sustainable yields of groundwater sources. In light of the fact that Sonoma County is not a water provider and does not have jurisdiction over other public water suppliers and therefore cannot effectively mandate groundwater management on its own, this goal may be difficult to achieve. As noted in the DEIR, the effect of water suppliers' use of groundwater on existing and future water users cannot be determined in the absence of sufficient data to establish the existing groundwater conditions and appropriate groundwater extraction levels. See also Master Response R (Groundwater Management).

Response to Comment #237-125:
See Master Response P (Urban Water Management Plans).

Response to Comment #237-126:
As noted in Section 6.1 (Growth Inducing Impacts), Draft GP2020 would accommodate projected growth in housing, agriculture, commercial and other development. However, Draft GP 2020 would not include growth beyond what is planned. In addition, the limitations on changes in land use designations established by the Board of Supervisors as part of GP 2020 further minimizes the potential for growth that would exceed projections.

Since the re-use of wastewater provides another source of water supply for Draft GP 2020 land uses and development, it increases the available water supply. As such, it may reduce the demand for fresh water. However, since Section 4.9 (Public Services) of the DEIR identifies a potential shortage of water supplies

for planned growth, waste water re-use is most likely to be used to serve planned growth than to increase pressure for unplanned growth.

Response to Comment #237-127:
The comment does not pertain to the adequacy of the DEIR.

Response to Comment #237-128:
See Master Response N (Climate Change).

Response to Comment #237-129:
Section 4.9 (Public Services) of the DEIR addresses the impacts of Draft GP 2020 land uses and development on water supply. Where applicable, the DEIR considers the Urban Water Management Plans in determining adequacy of water supplies for future demand in the urban service areas under Impact #4.9-1 (Insufficient Water Supplies to Meet the Future Water Demand of the Urban Service Areas). For other urban areas in the unincorporated County, the capacity of water providers to meet demand during drought periods is unknown. These providers rely upon groundwater for their supplies and do not generally have reliable data regarding the sustainable yields of their sources during extended drought. For that reason, and the fact that the County does not have authority over the water suppliers, the DEIR concludes that this impact is significant and unavoidable.

Response to Comment #237-130:
This comment pertains to a policy issue and not to the adequacy of the DEIR.

Response to Comment #237-131:
The comment does not pertain to the adequacy of the DEIR. A water shortage "emergency" would be declared by the entity responsible for provision of water supplies based upon the applicable circumstances and/or conditions in evidence.

Response to Comment #237-132:
This comment pertains to a policy issue and not to the adequacy of the DEIR. The SCWA, as a special district under California law, is not subject to County jurisdiction and therefore cannot be compelled to comply with Draft GP 2020 groundwater goals, objectives, and policies. Further, increased reliance on groundwater may not be inconsistent with Draft GP 2020, particularly if the increased use is consistent with sustainable yields over time. The Water Resources Element contains goals, objectives, and policies to coordinate with the SCWA in the assessment, protection, and management, where appropriate, of groundwater supplies.

Response to Comment #237-133:
See responses to comments #219-12, #222-05, #6-08, and #226-07.

Response to Comment #237-134:
The extent to which the proposed project is modified to incorporate mitigation measures from the reduced project, called the Mitigated Alternative in Section 5.0 (Alternatives), will be determined by the Board of Supervisors in its adoption of GP 2020. Similarly, the program priorities will be set by the Board in the future, depending upon available staffing, funding, and community input. Given the uncertainty of these factors, it is not possible to determine what is or is not most likely at the time of Plan adoption. For this reason, Draft GP 2020 includes a Monitoring Plan that periodically evaluates the progress made in implementing GP 2020.

Response to Comment #237-135:
Comment noted. California Assembly Bill 885 requires the State Water Resources Control Board (SWRCB) to develop statewide regulations for onsite wastewater treatment systems. These regulations have yet to be finalized. An updated draft is anticipated for release in spring of 2007, with a Draft EIR expected in summer of 2007. Regulations will become effective six months after adoption by the SWRCB, at which point the County would be required to comply.

Response to Comment #237-136:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Groundwater quality varies throughout Sonoma County and is considered in the review of any well permits and development projects where water resources are developed as part of the use. "Evaluate and consider" in this context refers to the need to test water quality, consider the information from the test, and apply it to the subject permit.

Response to Comment #237-137:
Section 4.5 (Hydrology and Water Resources) of the DEIR states that Mark West Creek forms a subbasin of the Russian River watershed and that it is a tributary to the Russian River. In response to the Comment regarding inclusion of all creeks as part of the integrated watershed, the discussions for each subbasin of the Russian River watershed (pages #4.5-8 through #4.5-13) include the creeks in each subbasin comprising the watershed.

Response to Comment #237-138:
The DEIR identifies the impacts of Draft GP 2020 land uses and development on water resources in Section 4.5 (Hydrology and Water Resources) and on water supply in Section 4.9 (Public Services). The analysis includes Impact #4.9-3 (New or Expanded Water Supply Facilities) where the impacts of new surface water or groundwater facilities are addressed. Since the specific facilities, wells, dams, and their locations are unknown at this time, the impacts are identified at a general, program level of detail appropriate for a General Plan Program EIR. See also Master Response C (Program EIR/Level of Detail and Master Response Q (SCWA Water Project).

Response to Comment #237-139:
See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #237-140:
See response to comments #237-24, #237-28, and #266-63. The growth inducing impacts of package treatment plants are included in the discussion under Section 6.1 (Growth Inducing Impacts) of the DEIR.

Response to Comment #237-141:
See Master Response M (Solid Waste Management). Methane gas will continue to be generated by the existing landfill for the foreseeable future, although if refuse disposal is reduced, then that will likely reduce the amount of methane produced over time.

Response to Comment #237-142:
Performance standards for new uses will be developed in the appropriate County codes and regulations.

As noted on page #4.0-2 of the DEIR, the significance criteria were derived from the CEQA Guidelines, the existing General Plan, environmental documents prepared recently on other projects in Sonoma County, and the professional standards and practices of the technical analyst who conducted the particular analysis. In addition, the standards of significance for the impact analysis of a General Plan are more qualitative than for a project EIR due to the nature of the General Plan as a policy document as opposed to a construction project. The standards used to evaluate the magnitude of the impacts are listed in the "significance criteria" subsections for each topic.

Response to Comment #237-143:
The DEIR identified a significant cumulative impact on biological resources due to the combination of development under Draft GP 2020 and the nine cities (page #6.0-9). The cumulative impact analysis for biological resources includes streams as part of the biological environment. Due to the level of detail of the cumulative impact analysis, it is not feasible to analyze stream segments individually

Response to Comment #237-144:
The No Project Alternative assumes that the existing General Plan would continue to be in place. Under this Alternative, the programs that have not yet been completed are assumed to be completed during the

2000-2020 planning period.

Response to Comment #237-145:
See response to comment #237-131.

Response to Comment #237-146:
The relationship between land use planning and water and wastewater system planning is important in order to assure that the capacity of the systems will be available to accommodate the projected growth in the General Plan and that the projected growth is within the capability of the systems. The Draft GP 2020 takes this approach. Establishing policy that improves cooperation between land use planning and public service agencies is a key element of the Draft GP 2020 Public Facilities and Services and Water Resources Elements. However, as described in the DEIR, the County of Sonoma does not have direct jurisdiction over most of the public service providers for the unincorporated area. See also Master Response S (Water Supply).

Response to Comment #237-147:
The policies in the Draft GP 2020 Public Facilities and Services and Water Resources Elements related to water and wastewater system management are the policies that should be adopted to address this issue.

Response to Comment #237-148:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #237-149:
The Urban Water Management Plan requirement in State law applies to water suppliers who serve more than 3000 connections or more than 3000 acre feet of water annually. As a result, the only water supplier serving the unincorporated County subject to this requirement is the Sonoma County Water Agency. The Agency's Urban Water Management Plan addresses water supplies for its contractors and other customers of the Agency and not for any other public water supplier or its customers. See also Master Response P (Urban Water Management Plans). The DEIR evaluates impacts of increased use of groundwater from wells to supply future uses and development in the unincorporated area in Impacts #4.5-5, #4.5-6, #4.5-7, and #4.9-2.

Response to Comment #237-150:
The comment does not pertain to the adequacy of the DEIR. The extent to which future energy supplies will be able to rely upon the geothermal resources is unknown. However, as a renewable resource, Draft GP 2020 Open Space and Resource Conservation Element supports continuing reliance upon the Geysers to meet energy demand. The question whether or not the source will continue to be available in the long term future would be determined as part of the proposed Strategic Plan recommended in Policy OSRC-15a.

Response to Comment #237-151:
The comment does not pertain to the adequacy of the DEIR. Draft GP 2020 includes policies and programs that support future mining operations to meet local aggregate demand. Future policy changes emphasizing out of County sources are speculative at this time and are beyond the scope of GP 2020. However, the shift to out of County sources would likely involve the shift of the environmental impacts associated with mining to the location of those sources and the impacts on roads, traffic, and air quality from transporting the materials would depend on the method of transport (e.g., by truck, rail, or barge).

Response to Comment #237-152:
The flooding impacts of Draft GP 2020 are addressed in Section 4.5 (Hydrology and Water Resources) of the DEIR. The gravel pits are being reclaimed to wetland and wildlife habitat and are expected to function as such for the long term future. Occasional flooding is expected to deposit some silt into the pits which would accumulate and eventually lessen the conductivity through the pits. The ARM Plan policies address this impact by imposing acreage limits and setback requirements and a phase out of terrace mining.

Response to Comment #237-153:
The comment does not pertain to the adequacy of the Draft EIR. The Draft GP 2020 Public Safety Element includes Policy PS-1o calling for an ordinance that would require improvement of Unreinforced Masonry Buildings in order to protect public safety. In addition, the County has already sent notices to the owners of these buildings as required by State law alerting them to the need for these improvements.

Response to Comment #237-154:
The comment does not pertain to the adequacy of the Draft EIR. The Department of Transportation and Public Works estimates that ordinary slide, erosion, and slip-out emergency projects that are performed each winter costs an average of about $2.5 to $5.0 million. Unless public roads are abandoned and/or additional funding for maintenance and upgrades is obtained, there do not appear to be any additional policies that would reduce the costs.

Response to Comment #237-155:
The comment does not pertain to the adequacy of the DEIR. Flood plains are often formed by the deposition of upstream sediments that contribute to a meandering river channel pattern. These depositions form the alluvial soils that comprise highly productive agricultural land. Sonoma County's watershed characteristics are generally described in Section 4.5 (Hydrology and Water Resources) of the DEIR.

Response to Comment #237-156:
See Master Response N (Climate Change)

Response to Comment #237-157:
The comment does not pertain to the adequacy of the DEIR. However, the levels of service identified in Figure CT-3 of the Draft GP 2020 Circulation and Transit Element are for PM Peak Hour weekday periods, which typically do not reflect tourism traffic that is normally associated with weekend travel.

Response to Comment #237-158:
It would be speculative to predict the uses that might be proposed for abandoned processing and tourism facilities in the event that these facilities were no longer viable for that use. However, re-use of these facilities would be subject to existing and Draft GP 2020 policies and implementing codes at the time of application.

Response to Comment #237-159:
Prediction of future trends in wine grape planting and related processing is difficult given the complexity of economic, market, and regulatory trends. In addition, agricultural cultivation is currently allowed in almost every land use category, and does not require discretionary approval. Because of the difficulty in predicting the extent of future wine grape planting and related support industry, analysis of related traffic impacts would also be speculative. However, the DEIR, in Section 5.0 (Alternatives), analyzes the Buildout Alternative, which assumes a greater level of production and related tourism and support uses than does Draft GP 2020. In general, the traffic impacts of this alternative are greater than under Draft GP 2020.

Response to Comment #237-160:
See Master Response P (Urban Water Management Plans), Master Response Q (SCWA Water Project), and Master Response S (Water Supply).

Response to Comment #237-161:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Draft GP 2020 contains policies and programs for implementation of Transfer of Development Rights (See Policies AR-2d, AR 8d, and Agricultural Resources Program #4).

Response to Comment #237-162:
This comment does not pertain to the adequacy of the DEIR.

Response to Comment #237-163:
See response to comment #237-28.

Response to Comment #237-164:
The comment does not pertain to the adequacy of the DEIR. The water quality impacts of wastewater disposal are analyzed under Impact #4.5-4 of the DEIR.

Response to Comment #237-165:
The text in the fourth line of the fourth paragraph on page #4.1-28 is revised as follows to correct the typographical error:

> "In addition, voters in **e**very city with the exception of Cloverdale have approved urban growth boundaries that cannot be changed without another vote by city residents."

Response to Comment #237-166:
The text on page #4.2-29 is revised as follows to correct the typographical error:

> "Ely Road - three lanes where necessary from Old Redwood Highway to the City of Petaluma"

Response to Comment #237-167:
The text on page #4.2-29 is revised as follows to correct the typographical error:

> "Lakeville Highway - four lanes from Petaluma Hill Road to Highway 37."

Response to Comment #237-168:
The second sentence of the second paragraph on page #4.3-1 is revised as follows to correct the typographical error.

> "The coastal mountain ranges **form** ~~from~~ several valleys**, each** with varying climate regimes."

Response to Comment #237-169:
The last sentence of the third paragraph on page #4.4-8 is revised as follows to correct the typographical error.

> "Noise levels associated with rail operations will vary depending on the type of vehicle used and whether noise alternative measures are incorporated."

Response to Comment #237-170:
The fifth sentence of the last paragraph on page #4.4-8 is revised as follows to correct the typographical error.

> "Elevations ~~in~~ range from 50 feet in the north, approximately one-half mile south of Mark West Creek, to 1,400 feet MSL at Taylor Mountain."

Response to Comment #238-01:
See response to comment #224-04.

Response to Comment #239-01:
The impact analysis in the DEIR is by nature a cumulative impact analysis of the effects of all future uses and development likely to occur under Draft GP 2020. In addition, Section 6.2 of the DEIR (Cumulative Impacts) addresses the cumulative impacts of growth and development in the cities and specific cumulative projects in combination with the uses and development allowed under Draft GP 2020. These impacts include the loss of agricultural land to non-agricultural land uses and to protection of biological resources as a result of the land uses and development allowed by Draft GP 2020. This section also addresses the public service impacts of agricultural processing and support uses located in the rural

areas.

The DEIR does not address the specific conversion of one use to another. However, if the conversion is to a new use allowed by Draft GP 2020, then it is addressed as part of the program level analysis throughout the DEIR. See Master Response C (Program EIR/Level of Detail).

Response to Comment #239-02:
The conversion of Site Class III timberlands to agriculture and other non-timber uses is addressed in Section 4.8 (Agriculture and Timber Resources) of the DEIR. The impacts of all Draft GP 2020 land uses and development, including timber conversions, on water resources and biological resources are addressed in Section 4.5 (Hydrology and Water Resources) and Section 4.6 (Biological Resources) of the DEIR. The County recently adopted a timberland conversion ordinance that regulates and limits timberland conversions to conserve the County's timberlands. Cumulative impacts are addressed in Section 6.2 (Cumulative Impacts) of the DEIR. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #239-03:
The impact described would likely be beneficial. See also Master Response N (Climate Change).

Response to Comment #239-04:
All Sonoma County timberland (regardless of Class) is subject to the recently adopted timberland conversion ordinance. See also response to comment #239-02.

Response to Comment #239-05:
The cumulative impacts of land uses and development allowed by Draft GP 2020, including the projected conversion of agricultural lands to residential development, are addressed throughout the impact discussions in the DEIR (see response to comment #239-01). The land uses and development addressed include subdivisions of land consistent with the densities portrayed in the Land Use Element (Land Use Maps), and rural uses such as agricultural processing, agricultural tourism, and public services and facilities. Residential densities on agricultural land that are allowed by the Land Use Maps are not only considered to be consistent with protection of agriculture, but also with the goal of city-centered growth. See Master Response C (Program EIR/Level of Detail).

Response to Comment #239-06:
Agricultural lands are defined as those which are designated as Land Intensive Agriculture, Land Extensive Agriculture, and Diverse Agriculture on the Land Use Maps. The impacts of buildout of these lands under the residential densities displayed on the Land Use Maps are addressed under the Buildout Alternative in Section 5.0 (Alternatives) of the DEIR. In addition, the Buildout Alternative assumes and analyzes an increased level of vineyard planting and concurrent growth of agricultural support uses. See also Master Response H (Range of Alternatives). Because this is a General Plan Program EIR, which analyzes the cumulative impacts of growth and development under the proposed plan, the alternatives analysis also provides the functional equivalent of a cumulative impact analysis of each alternative.

Response to Comment #239-07:
The DEIR analyzed the Mitigated Alternative in Section 5.0 (Alternatives), which included additional policies further limiting the potential for agricultural processing on agricultural lands. The Draft GP 2020 allows agricultural processing and support uses in industrial areas where infrastructure is available or planned to be available. However, for several reasons, processing and support uses necessary to support agricultural production in the County would be difficult to accommodate entirely within these areas. First, these uses generate processing wastes which may well overwhelm many of the smaller sewer systems in the County. Second, as noted in Section 4.9 (Public Services), the ability of many of these systems to increase capacity is limited by lack of funding and permitting to expand to meet currently projected demand, let alone the additional demand and expansion to accommodate all of the projected future processing and support uses. Third, processing and support uses are needed in close proximity to agricultural production in order to reduce the costs and impacts of hauling raw product to the plants.

In any case, from a countywide perspective, the impacts of locating these facilities in urban areas of the unincorporated county would be similar in nature to the impacts of allowing them in rural areas. For example, location of agricultural support uses in urban areas would result in land use incompatibilities with neighboring urban residents. Groundwater impacts would also be similar, as the water systems in the unincorporated area rely almost exclusively on groundwater resources. Traffic impacts could be greater due to the need for transportation of raw products to the urban areas for processing.

Section 5.0 (Alternatives) of the DEIR includes an analysis of the impacts of an alternative that would result in less processing uses in rural areas. The Mitigated Alternative evaluated the impacts of agricultural processing and support uses under a policy that 75% of the agricultural production would come from the local area. This policy would reduce the amount of crops that are imported, thereby reducing the overall demand for these support uses. See also Master Response H (Range of Alternatives) and response to comment #237-31.

Response to Comment #239-08:
The comment does not explain the rationale for the conclusion that Impact #4.8-1 should be different than in the DEIR. The DEIR concludes that the impact is less than significant in light of the Draft GP 2020 policies that reduce the conversion of agricultural lands to non-agricultural uses.

Response to Comment #239-09:
As noted in the discussion under Impact #4.8-1 on page #4.8-20 of the DEIR, Draft GP 2020 provides the policy framework for limiting the development opportunities on agricultural lands, including policies to protect against their subdivision, thereby reducing the impact to less than significant. See also response to comment #266-04 and #266-07.

Response to Comment #239-10:
See response to comment #239-09.

Response to Comment #239-11:
Section 4.5 (Hydrology and Water Resources) of the DEIR addresses the groundwater and water quality impacts of Draft GP 2020 land uses and development, including future well and septic systems.

Response to Comment #239-12:
See response to comment #239-09.

Response to Comment #239-13:
The land use compatibility impacts of Draft GP 2020 land uses and development, including residential uses in agricultural areas, are addressed in Section 4.1 (Land use, Population, and Housing). As noted there, the protection of agricultural lands is a guiding principle of Draft GP 2020. Nevertheless, the DEIR concludes that land use conflicts between agricultural and residential/urban uses would be significant and unavoidable.

Response to Comment #239-14:
Comment noted. Section 4.8 (Agricultural and Timber Resources) of the DEIR addresses the impacts of Draft GP 2020 on agricultural and timber resources rather than the project's impacts on public health and safety and other aspects of the environment. These latter impacts are addressed in other topical sections of the DEIR. Impact #4-8.2 specifically addresses the loss of agricultural land that would result from agricultural processing and support uses allowed by Draft GP 2020. The comment does not explain why the impact should be different than provided in the DEIR. See also response to comments #239-15 through #239-23.

Response to Comment #239-15:
Contrary to the comment, as described in the discussion under Impact #4.8-2, objectives and policies under Draft GP 2020 Goal AR-5 place reasonable limitations on the siting of agricultural processing and support uses. The comment does not specify what requirement of State law is being violated by not "capping" agricultural processing and support uses. Since these uses are included in the land uses and

development under Draft GP 2020, their impacts are addressed at a countywide level of detail in each of the topical sections of the DEIR.

Response to Comment #239-16:
The DEIR analyses in Sections 4.2 (Transportation), 4.3 (Air Quality), and 4.4 (Noise) assume that traffic patterns generally will continue to reflect the fact that the local wine grape crop is supplemented by imported grapes and that locally grown grapes are exported to out of county sites. It is not necessary for the DEIR to address the quality of the grapes that are imported. See also response to comment #239-15 and #239-17.

Response to Comment #239-17:
As noted under response to comment #239-15, the impacts of agricultural processing and support uses are analyzed in each topical section of the DEIR, including Section 4.2(Transportation), Section 4.3 (Air Quality), etc., on a countywide basis. Draft GP 2020 Policy AR-5a requires that the agricultural processing be proportional to the production on-site or in the local area. Project level impacts would be addressed in the project specific environmental document prepared for the use permit application for a proposed facility.

Response to Comment #239-18:
Projected agricultural support uses, including processing, are identified in Section 4.8 (Agricultural and Timber Resources) of the DEIR in Exhibit #4.8-4. In addition, Section 5.0 (Alternatives) of the DEIR, in Exhibit #5.0-1, identifies the characteristics of the Buildout Alternative. In this alternative, vineyard planting would be greater than under the Draft GP 2020. This increase in planting is assumed in the DEIR to result in a greater level of processing and other support uses. See also Master Response J (Buildout) and response to comments #230-40, #230-41, #230-42, #251-08, #266-07, #266-08, #266-28, and #266-15.

Response to Comment #239-19:
The specific water demand for each use is dependent upon the location, size, and other aspects of the operation. Section 4.5 (Hydrology and Water Resources) of the DEIR addresses the impacts of these and other land uses and development under Draft GP 2020 at a Program EIR level, particularly under Impact #4.5-5 . See also Master Response R (Groundwater Management).

Response to Comment #239-20:
The specific number and extent of septic systems developed in the future is dependent upon many site specific factors and is indeterminable at this countywide level of detail. The impacts on water and waterways of all land uses and development, including agricultural processing and support uses, are identified and addressed in Section 4.5 (Hydrology and Water Resources).

Response to Comment #239-21:
Traffic impacts resulting from all Draft GP 2020 land uses and development are analyzed in Section 4.2 (Transportation) of the DEIR, including traffic from agricultural support uses. Traffic impacts from agricultural support uses were not analyzed separately. Buildout of all Draft GP 2020 land uses and development, including agricultural and agricultural support uses, was analyzed in Section 5.0 (Alternatives) of the DEIR under the Buildout Alternative. See also Master Response J (Buildout) and Master Response K (Agricultural Traffic).

Response to Comment #239-22:
The impacts of all land uses and development, including agricultural processing and support uses, on surrounding properties and residents including traffic, noise, water and biotic resources are addressed in Section 4.2 (Transportation), Section 4.3 (Noise), Section 4.5 (Hydrology and Water Resources), and Section 4.6 (Biotic Resources), respectively. Impacts on uses surrounding these facilities are addressed in Section 4.1 (Land Use, Population, and Housing) under Impact #4.1-3.

Response to Comment #239-23:
As noted in response to comment #229-14 through #229-22, the DEIR discusses the impacts of

agricultural processing and support uses in each of the topical sections as part of all of the land uses and development under Draft GP 2020. The agricultural processing and support uses that are evaluated would continue to include imported products provided that the raw products are primarily from the local area, as mandated by Policy AR-5a, which does not define "local area." As in the past, the term "local area" would be determined on a case by case basis as each processing operation goes through the entitlement process at the County.

Response to Comment #239-24:
Comment noted. See response to comment #239-14. The DEIR in Section 4.8 (Agricultural and Timber Resources) analyzes agricultural tourism uses in the same manner as agricultural processing and support uses.

Response to Comment #239-25:
See response to comment #239-23. "Local area" is determined on a project by project basis as part of the project review process.

Response to Comment #239-26:
As a General Plan EIR, the DEIR addresses these impacts at a countywide scale. See Master Response C (Program EIR/Level of Detail). It is not practical or feasible to address the site specific impacts of each project. As such, the DEIR analyzes the impacts of all land uses and development allowed by Draft GP 2020, including lodging, recreation, bed and breakfast inns, campgrounds, etc. Traffic, water resources, biological resources, public safety, noise, and air quality are addressed in Sections 4.2, 4.5, 4.6, 4.7, 4.4, and 4.3, respectively.

Response to Comment #239-27:
See response to comment #239-26. The impacts of uses such as wine tasting, food services, special events, grange halls, and other uses allowed by Draft GP 2020 are addressed in the topical sections of the DEIR on traffic, water resources, biological resources, public safety, noise, air quality, etc. See also Master Response J (Buildout) and response to comment #251-08.

Response to Comment #239-28:
The impact of Draft GP 2020 that is addressed in Section 4.8 (Agriculture and Timber Resources) of the DEIR under Impact #4.8-4 is the conversion of commercial timberland to non-timber uses. The impacts of timber conversions on water, biological, and other aspects of the environment are addressed in each of the sections of the impact analysis, along with the other land uses and development under Draft GP 2020.

Response to Comment #239-29:
The recent adoption of the timberland conversion ordinance by the County has been reflected in Policy OSRC-12e of the Draft GP 2020 Open Space and Resource Conservation Element. Since the ordinance is similar to that recommended by Draft GP 2020, no alteration of the DEIR is necessary.

Response to Comment #239-30:
The DEIR identifies the potential adverse impacts of the Draft GP 2020 land uses and development under its proposed policies. Section 4.6 (Biological Resources) of the DEIR addresses the impacts of these land uses and development on biological resources such as forests.

Response to Comment #239-31:
The comment does not pertain to the adequacy of the DEIR. The impacts of Draft GP 2020 land uses and development on biological resources, including forests, are addressed in Section 4.6 (Biological Resources) of the DEIR.

Response to Comment #239-32:
The comment does not pertain to the adequacy of the DEIR.

Response to Comment #239-33:

The recently adopted timberland conversion ordinance provides regulatory protection for Site Class III and all other Classes of timberlands in Sonoma County. See also response to comment #239-28 and #239-29.

Response to Comment #239-34:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR The recently adopted timberland conversion ordinance requires, among other mitigation measures, that substantial public benefits be provided that offset the loss of timberlands resulting from the conversion. The specific nature and mitigating value of the public benefit is more appropriately determined as part of the review of the actual project.

Response to Comment #239-35:
Impact #4.1-2 addresses the land use conflicts from intrusion of residential uses into agricultural areas. The comment appears to confuse this impact with the impact of agricultural support and agricultural tourism uses in rural areas and neighborhoods, which is addressed under Impact #4.1-3. Draft GP 2020 includes sites zoned for commercial and industrial uses in urban areas where services and infrastructure are planned and does not allow encroachment of these uses into agricultural or timber areas. With respect to the suggestion for creation of additional areas dedicated to agricultural support or tourism uses, the Draft GP 2020 Agricultural Resources Element includes polices that are established specifically to avoid such concentrations and the water, traffic, land use, and other impacts that would result. See also response to comment #266-10.

Response to Comment #239-36:
Section 5.0 (Alternatives) of the DEIR analyzes the Mitigated Alternative, which assumes a lesser level of agricultural support and tourism uses than under Draft GP 2020. For example, agricultural processing uses would require that 75% of the product be grown or raised on site or in the local area. Under the Mitigated Alternative, Impact #4.1-3 would be less than under Draft GP 2020 but would still be significant and unavoidable.

However, the Draft GP 2020 supports the ability of agriculture to locate support uses and agricultural tourism in agricultural areas as the primary tool for assuring the continued economic viability of agricultural production. Without this tool, production would be in jeopardy of succumbing to pressure for rural residential and other non-agricultural uses, as has occurred in the past.

Response to Comment #239-37:
The comment states the opinion that the GP 2020 DEIR is inadequate because it fails to provide sufficient information for informed decision-making, with citations to case law and the State CEQA Guidelines regarding the standards for a legally adequate EIR. The commenter's specific concerns regarding the adequacy of the DEIR are stated in subsequent comments and are addressed in responses to those comments.

Response to Comment #239-38:
The comment is unclear in its assertion that the DEIR approach is "improper" because it defers information about project-related and cumulative impacts. As a General Plan EIR, the level of detail of the analysis, mitigation measures, and alternatives is appropriate for the level of detail of the project, which is an update of a Countywide General Plan. The analysis is by nature a cumulative analysis of the future development and uses that are likely to occur under Draft GP 2020. See also response to comment #239-48 and Master Response C (Program EIR/ Level of Detail).

Response to Comment #239-39:
See Master Response C (Program EIR/ Level of Detail).

Response to Comment #239-40:
The comment states the opinion that the GP 2020 DEIR is inadequate because it fails to provide necessary facts and analysis to permit informed decision-making. The commenter's specific concerns regarding the adequacy of the DEIR are stated in subsequent comments and are addressed in responses

to those comments.

Response to Comment #239-41:
The land uses allowed by Draft GP 2020 are defined at a General Plan level of detail, including residential growth, commercial and industrial development, agricultural support uses, tourism. etc. The impacts of these uses on Hydrology ands Water Resources are addressed in Section 4.5 (Hydrology and Water Resources). Alternatives to Draft GP 2020 are identified and analyzed in Section 5.0 (Alternatives) and are also compared to Draft GP 2020. Although the comment is critical of the DEIR for failing to include all feasible mitigation measures and alternatives capable of reducing significant hydrology and water quality impacts, it does not identify any additional measures beyond those discussed in the DEIR. See also Master Response F (Explanation for Lack of Mitigation Measures) and Master Response H (Range of Alternatives).

Response to Comment #239-42:
The impacts of Draft GP 2020 on biological resources are identified and addressed in Section 4.6 (Biological Resources). Since the specific number of acres and full extent of each habitat type in Sonoma County is unknown, the DEIR assumes that impacts of Draft GP 2020 land uses and development would be significant, at least until such time that the Draft GP 2020 programs such as the Comprehensive Habitat Mapping Program described in Policy OSRC-7j and OSRC Program 16 can be completed. These and other policies are generally described in Section 4.6 under Impacts #4.6-1, #4.6-2, #4.6-3, and #4.6-4. This section also lists all of the known species and habitat types in Sonoma County. Alternative policies are generally described in Section 5.0 (Alternatives) under the Mitigated Alternative.

Response to Comment #239-43:
Contrary to the comment, the DEIR in Section 4.9 (Public Services) provides an estimate of existing and future water demand for both urban and rural areas. These figures have also been updated to reflect the recent adoption of the 2005 Urban Water Management Plan by the Sonoma County Water Agency. See also Master Response P (Urban Water Management Plans) and Master Response S (Water Supply).

Response to Comment #239-44:
The DEIR, in Section 4.9 (Public Services) identifies the sources of water, the impacts of development of additional water supplies, the need for additional water supply facilities, and the likely impacts of new facilities at a level of detail appropriate for a General Plan and Program EIR.

Response to Comment #239-45:
The cumulative impacts of Draft GP 2020 on water supply, combined with other demands on water resources, are addressed in Section 6.2 (Cumulative impacts) of the DEIR under “Hydrology and Water Resources”. As noted in response to comment #266-56 regarding biological resources, the groundwater conditions in Sonoma County are not sufficiently known by the scientific community for the kind of detailed analysis requested by the comment. Nor is the existing and future likely surface and groundwater demand well understood. As a result, the Draft GP 2020 and DEIR focus on adoption of a strategy to increase the County’s knowledge of water resource conditions and water demand and to take appropriate management action accordingly. The DEIR acknowledges that the impact of Draft GP 2020 is therefore significant and unavoidable. Water imports are not anticipated to be a source of water for development and uses under Draft GP 2020. See also Master Response C (Program EIR/Level of Detail) and Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #239-46:
See Master Response N (Climate Change).

Response to Comment #239-47:
DEIR Section 4.9 (Public Services) addresses the impacts of increased wastewater flows and demand for increased wastewater treatment facilities, either new or expanded. Water quality impacts from these facilities, including septic systems, package treatment plants, and conventional wastewater treatment systems, is addressed in Section 4.5 (Hydrology and Water Resources). Since wastewater systems are currently and will continue to be regulated by Sonoma County PRMD, special districts which operate

wastewater systems, and by the applicable Regional Water Quality Control Board, these impacts are deemed to be less than significant.

Agricultural processing and support services generally do not rely on public sewer and water. Therefore, eliminating their development would not significantly reduce demand for these public services. In fact, if agricultural processing and support uses were located within areas served by public sewer and water, the increased demand upon these public systems would be greater than proposed under Draft GP 2020, resulting in greater impacts on wastewater system demand and the increased likelihood that existing systems that are near capacity would not be able to serve them.

Response to Comment #239-48:
The comment states a number of principles about the analysis of cumulative impacts. Cumulative impacts are described in Section 6.2 (Cumulative Impacts) of the DEIR. As noted in that section, with respect to the cumulative impacts of growth and development that could occur under Draft GP 2020 in the unincorporated area of the County, the geographic area of concern is the unincorporated area. Since cumulative development in the unincorporated area is incorporated into the project description and is the focus of the document's environmental impact analysis, the analyses under the various subject areas in the DEIR take account of the impacts of all future development within the unincorporated area of the County. In addition, where appropriate, the DEIR also analyzes the additional cumulative impact from development within the nine cities within the County – for most of this cumulative impact analysis, the geographic area of concern is the entire County. As noted on page #6.0-4 of the DEIR, there are also three specific development projects in various stages of entitlement that are not part of the proposed project, but would contribute to the cumulative effects of future growth and development within the County; these are the Graton Rancheria Hotel and Casino, the Sonoma County Airport Master Plan, and the Sonoma State University Faculty Housing Project, which have been analyzed at a level of detail commensurate with available information.

Because the DEIR is a program EIR that analyzes the impacts of future growth and development that might reasonably be expected to occur in the County through the year 2020 as a result of the proposed general plan update, the impact analysis in the DEIR is by definition a cumulative impact analysis, considering not only the impacts of development in the unincorporated area of the County but also any contributing development within the cities and adjacent counties, where appropriate. One of the primary purposes of a program EIR is to ensure consideration of cumulative impacts that might be overlooked in a case-by-case analysis (see CEQA Guidelines, § 15168, subd.(b)). Consistent with CEQA, the discussion of cumulative impacts is guided by standards of practicality and reasonableness. Because the DEIR is a program EIR that considers the impacts of the goals, objectives, policies, and programs in the proposed GP 2020, the analysis of cumulative impacts is less detailed than in a project-level EIR, corresponding to the level of detail of the plan itself (see CEQA Guidelines, § 15152, subd. (b)).

Consequently, cumulative biological impacts are also analyzed in Section 4.6 (Biological Resources) of the DEIR. Exhibits #4.6-1 through #4.6-3 include occurrences of special status species and sensitive natural communities, including wetlands, throughout the County. Cumulative impacts on land use, transportation, hydrology and drainage, and public services are also analyzed in each section dealing with the particular subject area; growth inducing impacts are discussed in Section 6.1 (Growth Inducing Impacts) of the DEIR.

Response to Comment #239-49:
The cumulative impact analysis in Section 6.2 (Cumulative Impacts) is appropriate for a Program EIR for a General Plan. By its very nature, it is a broad analysis of the impacts of future land uses and development in the County. A Program EIR is not required to analyze detailed projects or provide exhaustive studies of every parcel of land or neighborhood in a County consisting of over 1,500 square miles. As a General Plan EIR, the DEIR not only addresses cumulative impacts in Section 6.2, but also in the individual topical areas in Section 4 (Environmental Setting, Impacts, and Mitigation Measures). These sections also identify additional mitigation measures available to reduce impacts.

Response to Comment #239-50:

The comment states a number of principles about the identification of feasible mitigation measures in an EIR. Although the comment states the opinion that the DEIR is inadequate because it fails to identify feasible measures that could reduce or eliminate significant impacts, it does not provide any details or examples of feasible mitigation measures that could reduce or avoid significant impacts but were not analyzed in the DEIR. Accordingly, no further response is warranted.

Contrary to the comment, the DEIR identifies 32 additional feasible mitigation measures for Draft GP 2020. Furthermore, the Final EIR, through responses to comments, offers additional policies to reduce the impacts of Draft GP 2020.

Response to Comment #239-51:
The comment summarizes the comment's concerns and states the opinion that the DEIR is inadequate under CEQA. The commenter's specific concerns regarding the adequacy of the DEIR are stated in previous comments and are addressed in responses to those comments.

Response to Comment #240-01:
See Master Response N (Climate Change).

Response to Comment #240-02:
Throughout Section 4.0 (Environmental Setting, Impacts and Mitigation Measures), the DEIR identifies additional mitigation measures available to reduce identified significant impacts. With respect to consideration of other additional measures, see Master Response F (Explanation for Lack of Mitigation Measures) and Master Response I (Land Use Changes). See also response to comment #239-50.

Response to Comment #240-03:
The DEIR includes all of the sections listed in the comment including a project description (Section 3.0), project analysis (Section 4.0), cumulative impacts (Section 6.2), and alternatives (Section 5.0). See also response to comment #240-02.

Response to Comment #240-04:
See Master Response N (Climate Change).

Response to Comment #240-05:
See Master Response N (Climate Change).

Response to Comment #240-06:
See Master Response N (Climate Change) and Master Response J (Buildout).

Response to Comment #240-07:
See Master Response N (Climate Change).

Response to Comment #240-08:
See Master Response N (Climate Change).

Response to Comment #240-09:
See Master Response N (Climate Change).

Response to Comment #240-10:
See Master Response N (Climate Change).

Response to Comment #240-11:
See Master Response N (Climate Change).

Response to Comment #240-12:
See Master Response N (Climate Change).

Response to Comment #240-13:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment will be forwarded to the decision making bodies for their consideration. Draft GP 2020 has been modified to incorporate policies to address greenhouse gas emissions in the Circulation and Transit, Land Use, and Open Space and Resource Conservation Elements. See Master Response N (Climate Change).

Response to Comment #241-01:
See Master Response P (Urban Water Management Plans) and Master Response A (DEIR Review Period).

Response to Comment 242-01:
See Master Response A (DEIR Review Period).

Response to Comment #243-01:
See Master Response E (Extent of Significant Impacts).

Response to Comment #243-02:
Contrary to the comment, information sufficient to draw conclusions regarding groundwater and surface water conditions and to establish the basis for appropriate mitigation measures or justification for water resource management plans is critical. As noted in Section 4.5(Hydrology and Water Resources) of the DEIR, Draft GP 2020 provides policy support for data collection efforts necessary to determine appropriate water resource management programs in the future. See Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #243-03:
The comment suggests a regulatory program that would limit all new (after a certain date) uses of water to a level that is proven sustainable. Unless and until the sustainable level of each basin or water body is determined, this program would not be possible or feasible. In addition, County denial of a well permit based upon unsubstantiated conclusions regarding available supplies would be premature and legally risky. Draft GP 2020 includes a new Water Resources Element that provides the policy framework for improved data collection, reporting of problem areas, and management actions to address identified problems. See also Master Response R (Groundwater Management).

Response to Comment #243-04:
Comment noted.

Response to Comment #244-01:
The comment states a number of principles about the identification of feasible mitigation measures in an EIR. Although the comment states the opinion that the DEIR is inadequate because it fails to identify feasible measures that could reduce or eliminate significant impacts, it does not provide any details or examples of feasible mitigation measures that could reduce or avoid significant impacts but were not analyzed in the DEIR. Accordingly, no further response is warranted.

The DEIR identifies 32 additional feasible mitigation measures for Draft GP 2020. Furthermore, the Final EIR, through responses to comments, offers additional policies to reduce the impacts of Draft GP 2020. See also Master Response E (Extent of Significant Impacts).

Response to Comment #244-02:
Comment noted. The DEIR identifies these impacts and offers additional mitigation measures to further reduce them. See also Master Response E (Extent of Significant Impacts).

Response to Comment #244-03:
Sections 3 and 5 of the Draft GP 2020 Circulation and Transit Element provide comprehensive policies that promote alternative transportation modes.

Response to Comment #244-04:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comments have been forwarded to the decision making bodies for their consideration. The Draft GP 2020 Land Use, Circulation and Transit, and Open Space and Resource Conservation Elements have been modified to incorporate policies addressing greenhouse gas emissions. See also Master Response N (Climate Change).

Response to Comment #244-05:
The Draft GP 2020 includes a new Water Resources Element that focuses on future management of water resources, including Section 3.5 addressing exports, Section 3.4 addressing re-use, and Section 3.2 addressing well monitoring. The DEIR addresses water supply issues in Section 4.9 (Public Services), under Water Supply Services. The DEIR discusses the adequacy of future supplies under Impact #4.9-1. See also response to comment #235-25.

The DEIR addresses water quality and groundwater issues in Section 4.5 (Hydrology and Water Resources). See also response to comment #235-25, Master Response R (Groundwater Management), and Master Response S (Water Supply).

Response to Comment #244-06:
See Master Response B (Jurisdiction), Master Response R (Groundwater Management), and Master Response S (Water Supply).

Response to Comment #244-07:
The DEIR acknowledges and describes the impacts of Draft GP 2020 on biological resources, identifies the proposed Draft GP 2020 policies that mitigate these impacts, and suggests additional mitigation where feasible. The comment does not provide suggestions or recommendations for additional policies for conservation of these resources. As noted in the impact discussion in Section 4.6 (Biological Resources), the Draft GP 2020 already includes policies in Sections 3.1 and 3.2 of the Open Space and Resource Conservation Element for protection of habitat connectivity corridors, notice to applicants of State and Federal Agency requirements in habitat areas, protection of oak woodlands, and protection of known wetlands.

Response to Comment #244-08:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Section 4.8 (Agriculture and Timber Resources) of the DEIR addresses the loss of timberland to non-timber uses. The habitat impacts of Draft GP 2020 land uses and development, including timber conversions, are addressed in Section 4.6 (Biological Resources) of the DEIR.

Response to Comment #244-09:
Comment noted. See Master Response E (Extent of Significant Impacts).

Response to Comment #245-01:
See Master Response C (Program EIR/Level of Detail) and Master Response R (Groundwater Management).

Response to Comment #245-02:
Although the DEIR does not mention the Canon Manor West (CMW) Assessment District FEIR due to the timing of the completion of that document, it briefly describes and relies upon the groundwater assessment that formed the basis for the conclusions in the CMW FEIR and the project's findings (See *Groundwater Study for the Canon Manor West Subdivision Assessment District*, Todd Engineers, June 2004), cited on DEIR page 4.5-25). With respect to the "contradictory findings" between the CMW FEIR and the Rohnert Park General Plan EIR, the CMW Final EIR provides a good explanation of the reasons for the differences and why they are not contradictory. Regarding the O.W.L. Foundation's submittal of documents on the CMW project, the Board of Supervisors specifically found that these documents, which were submitted 5 months after the close of the comment period on the CMW DEIR, did not constitute new information not already addressed in the CMW FEIR (Board of Supervisors Resolution No 05-0133,

2/8/05). The comment has not provided any explanation of how these documents are relevant to the analysis in the Draft GP 2020 EIR. No further response is required.

Response to Comment #245-03:
The comment misstates the conclusions of the CMW EIR. As described on page #4.5-25 of the GP 2020 DEIR, the CMW EIR found that although there had been an historical decline in groundwater levels during the 1970s and 1980s, recharge and pumping in the basin are currently in rough equilibrium. The CMW EIR found that the development of the CMW site would be a less than significant project impact, but a potentially significant cumulative impact due to the uncertainty of Rohnert Park's future pumping of groundwater from the same basin. In the resolution approving the CMW project, the Board of Supervisors specifically found that although evidence in the record supported a conclusion that the significant adverse cumulative impact on groundwater would not occur, the Board did not have control over whether Rohnert Park would continue to limit its groundwater pumping and therefore, "out of an abundance of caution," concluded that the potential cumulative impact was significant and unavoidable (Board of Supervisors Resolution No. 05-0133, 2/8/05).

Section 4.5 (Hydrology and Water Resources) of the GP 2020 DEIR considered the conditions of the South Santa Rosa Plain groundwater subbasin as part of its evaluation of the impacts of Draft GP 2020 on groundwater in the County. The inclusion of the details of individual projects such as the CMW project is beyond the scope of a Program EIR for a countywide general plan. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #245-04:
See response to comment #228-10 and #245-03.

Response to Comment #245-05:
See response to comment #228-10.

Response to Comment #245-06:
The cited sections of the DEIR, pages #4.5-25 and #4.5-28, provide background discussion, not impact analysis. The groundwater impact analysis is provided beginning on page #4.5-50. It should be noted that Draft GP 2020 includes a new Water Resources Element that provides the policy framework for improved data collection, reporting of problem areas, and management actions to address identified problems. See also Master Response Q (SCWA Water Project), Master Response R (Groundwater Management), Master Response C (Program EIR/Level of Detail), Master Response S (Water Supply), and response to comment #249-01.

Response to Comment #245-07:
The three wells operated by the SCWA in the Santa Rosa Plain are discussed on page #4.9-3 of the DEIR in Section 4.9 (Public Services), which analyzes water supply issues. See also response to comment #237-92.

Response to Comment #245-08:
The DEIR acknowledges that future water supplies, both from surface water and groundwater, are uncertain and therefore concludes that development and uses allowed by Draft GP 2020 may result in significant and unavoidable impacts. See response to comments #235-03, 237-92, Master Response Q (SCWA Water Project), and Master Response S (Water Supply).

Response to Comment #246-01:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for their consideration.

Response to Comment #246-02:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for their consideration.

Response to Comment #246-03:
Traffic calming is counterproductive for arterial roadways intended primarily for through traffic, as its purpose is to divert traffic to other roadways rather than to accommodate mobility. Arterial roadways such as Arnold Drive can be designed and maintained in such a way that the scenic character of the roadway continues to be preserved and protected. By accommodating through traffic on Arnold Drive and Highway 12, other local roads can be traffic calmed and more oriented toward pedestrian and bicycle safety.

Response to Comment #246-04:
See response to comment #246-02 and #246-03. The Draft GP 2020 Circulation and Transit Element supports traffic calming in many communities in the County. However, much of Arnold Drive is designated for arterial status in order to provide mobility in Sonoma Valley.

Response to Comment #247-01:
The gist of the comment appears to be that the Draft GP 2020 Air Transportation Element (ATE) will have significant environmental impacts because it allows commercial airline service at the County airport, that these commercial airlines will demand development at the airport, that federal preemption will prevent the County from denying the airlines' demands, and that the development will have significant environmental impacts, including inducing growth beyond what has been projected for the Draft GP 2020 and the DEIR.

As required by CEQA, the DEIR analyzes the environmental impacts that are anticipated to occur with use of the Sonoma County Airport as set forth in the ATE. These uses include commercial airlines services and related infrastructure and services consistent with the projected airline operations. The impacts are addressed in various impact sections, including Section 4.2 (Transportation), Section 4.3 (Air Quality), and Section 4.4 (Noise). Attempting to predict what future airlines might demand beyond what is projected in the ATE in the way of "airport development and the environmental consequences of that development, is too speculative and is not required by CEQA. (See Pub. Res. Code, Section 21061 [EIR must provide information about effects that a project "is likely to have on the environment"]; CEQA Guidelines Section 15145 [speculation not required]).

It should be noted that Draft GP 2020 does not propose any changes to the goals, objectives, and policies of the ATE that would alter the existing goals, objectives, and policies that pertain to the operation of commercial airline services**.** It should further be noted that the County, as the proprietary owner of the County airport, is not as susceptible to federal preemption as it would be if it were solely a local governing body, and is not necessarily obligated to acquiesce to the demands of commercial airlines services for development beyond what is necessary to continue to operate the airport in compliance with federal laws.

Response to Comment #248-01:
See Master Response A (DEIR Review Period).

Response to Comment #249-01:
The Canon Manor West (CMW) Subdivision Assessment District EIR was prepared and certified for a specific project involving the provision of sewer and water services to existing lots on older septic systems experiencing a high degree of failure. Due to the location of this project in the southern Santa Rosa Plain groundwater basin, its proposed use of well water for buildout of the existing lots in CMW raised concerns about the potential for additional groundwater decline. The EIR concluded that the impacts of the project on groundwater levels would be less than significant, but that cumulative impacts may be significant due to the potential for other water users in the area that are not under the jurisdiction of the County of Sonoma, such as the City of Rohnert Park, to increase their rate of use. See also response to comment #245-03.

The DEIR discusses the issue of potential groundwater issues in the Santa Rosa Plain groundwater basin in Section 4.5 (Hydrology and Water Resources); on pages #4.5-25-26, and under Impact #4.5-5. The DEIR addresses these impacts at a level of detail appropriate for a General Plan rather than a specific project, and concludes that potential impacts on air quality, groundwater levels, traffic, noise, and traffic circulation could be significant and unavoidable. In this context, there is no need to include the details of

the CMW EIR or other individual projects in this document. See also Master Response R (Groundwater Management) and Master Response C (Program EIR/Level of Detail).

Response to Comment 249-02:
See response to comment #245-02.

Response to Comment #249-03:
The Rohnert Park Water Supply Assessment is mentioned as background in Section 4.5 (Hydrology and Water Resources) of the DEIR. Litigation was filed challenging the adequacy of the assessment. The Court subsequently found that the study area selected by the City was not large enough. However, this information does not alter the conclusions of the DEIR, which identifies and addresses the groundwater impacts of the Draft GP 2020 and which includes consideration of potential groundwater decline in the area surrounding Rohnert Park. See also the response to comment #249-01.

Response to Comment #249-04:
See response to comment #249-01 and #249-03.

Response to Comment #249-05:
See response to comment #228-10.

Response to Comment #249-06:
The City of Rohnert Park's proposed Specific Plans along the Petaluma Hill Road corridor are not under the jurisdiction of the County of Sonoma. The impacts of these plans are being addressed by environmental impact reports prepared under the City's land use authority. However, since the DEIR for Draft GP 2020 considers the cumulative impacts of land uses and development in the cities, it takes into account the impacts of these plans that might affect the unincorporated area outside of the city. For example, traffic generated by future land use in the City is included in the Transportation Analysis in Section 4.2 and increased reliance on groundwater is considered in evaluating the groundwater impacts in Section 4.5. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #249-07:
Impacts on groundwater supplies and recharge areas, including the Southern Santa Rosa Plain, are discussed in Section 4.5 (Hydrology and Water Resources) of the DEIR, and analyzed under Impact #4.5-5 (Groundwater Level Decline). Draft GP 2020 recognizes the past groundwater conditions in this area and the potential for groundwater declines to occur in the future. Policy WR-2h states:

> "In recognition of concerns regarding the potential for overdraft conditions in the South Santa Rosa Plan Groundwater Basin, give a high priority to preparation of a groundwater assessment and adoption of a management plan or other appropriate actions in this area."

See also Master Response R (Groundwater Management).

Response to Comment #249-08:
The redevelopment of the former Agilent Plant is a proposal before the City of Rohnert Park and is not under the jurisdiction of the County of Sonoma. The impacts of development pursuant to the General Plans of all of the cities are included in the cumulative impact analyses conducted in the DEIR. The specific impacts of this project will be assessed by the City of Rohnert Park as part of the City's review process.

Response to Comment #249-09:
The Central Landfill is currently not being used for solid waste disposal; any existing contamination issues are part of the existing environmental setting and not an impact of GP 2020. See Master Response M (Solid Waste Management) regarding the County's remediation of leachate and gas constitutents at the Central Landfill.).

The proposed Graton Rancheria Casino and Hotel Project west of the City of Rohnert Park is identified as

one of the cumulative projects in Section 6.2 (Cumulative Impacts) on page #6.0-4. As a result, the projects impacts are included in the analysis in this section to the extent that the project description is known. However, since this project is undergoing its own environmental review, the project details remain in flux. Further, the Draft GP 2020 DEIR does not address the project's impacts in detail, since it is a Program EIR. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #249-11:
See response to comment #228-10. More recent data from Rohnert Park are described on pages #4.5-25 and #4.5-26 of the DEIR.

Response to Comment #249-12:
See Master Response P (Urban Water Management Plans).

Response to Comment #249-13:
See Master Response P (Urban Water Management Plans), Master Response R (Groundwater Management), and Master Response S (Water Supply). The DEIR addresses the impacts of Draft GP 2020 on groundwater levels in Section 4.5 (Hydrology and Water Resources) of the DEIR, under Impact #4.5-5 (Groundwater Level Decline).

Response to Comment #249-14:
This comment does not pertain to the adequacy of the DEIR. See also response to comment #235-11.

Response to Comment #249-15:
This issue is addressed in the discussion of the adequacy of water supplies to meet the future needs of rural area residents in Section 4.9 (Public Services), under Impact #4.9-2. See also Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #249-16:
See Master Response S (Water Supply).

Response to Comment #249-17:
The Draft GP 2020 Water Resources Element includes recommended policies and programs to address water resources in the future. See Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #250-01:
As noted in Section 6.2 (Cumulative Impacts), the DEIR includes future City public service and infrastructure projects, including the Integrated Recycled Water Program (IRWP) in its assessment of impacts of future land uses and development allowed by Draft GP 2020 at a programmatic level of detail appropriate for a General Plan. Impacts to water quality, including from treated wastewater used for agriculture and landscaping, are addressed in Impact #4.5-4. See also response to comments #262-38, #263-13, and #286-29 and Master Response C (Program EIR/Level of Detail).

Response to Comment #250-02:
This comment does not pertain to the adequacy of the DEIR. See also Master Response R (Groundwater Management). See also response to comment #249-03.

Response to Comment #250-03:
See response to comment #228-10 and #249-01.

Response to Comment # 250-04:
See response to comment #228-10 and Master Response R (Groundwater Management).

Response to Comment #250-05:
As noted in Section 4.5 (Hydrology and Water Resources) of the DEIR, under Impact #4.5-5 (Groundwater Level Decline), Draft GP 2020 proposes policies in the Water Resources Element that

provide a strategy for addressing groundwater problems as they are identified and substantiated, including Policies WR-2i and WR-2j. See also Master Response R (Groundwater Management).

Response to Comment #250-06:
See response to comments #250-05 and #250-07. County permits for drilling of new wells in areas of groundwater contamination are subject to the applicable Regional Water Quality Control Board Basin Plan regulations.

Response to Comment #250-07:
Section 4.5 (Hydrology and Water Resources) of the DEIR addresses groundwater quality issues in Sonoma County. Section 4.13 (Hazardous Materials) of the DEIR addresses issues related to contamination of groundwater and refers the reader to the appropriate regulatory agencies that track sites. Draft GP 2020 provides for compliance with the existing regulatory programs in order to address these problems in Section 5.3 of the Public Safety Element. It is not the role of the DEIR to analyze how existing contamination is addressed under these current regulatory programs.

Response to Comment #250-08:
See response to comment #250-06 and #250-07.

Response to Comment #250-09:
See response to comment #250-07.

Response to Comment #250-10:
See response to comment #218-63.

Response to Comment #250-11:
This comment does not pertain to the adequacy of the DEIR. As a policy matter, Draft GP 2020 policies support many different methods of wastewater disposal provided that they meet applicable standards of the Regional Water Quality Control Boards. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #251-01:
See Master Response E (Extent of Significant Impacts) and Master Response G (Recirculation).

Response to Comment #251-02:
The DEIR recognized the limitations of the capacity of government at all levels, including county, city, state, federal, and other local agencies, to provide the necessary services and infrastructure, including maintenance of existing services/infrastructure as well as future expansion. This problem is discussed in Section 4.9 (Public Services) of the DEIR; the uncertainty of funding sources is one of the primary reasons why, in spite of the inclusion of many policies and programs that would support increased services and infrastructure, the impacts remain significant and unavoidable. See also Master Response E (Extent of Significant Impacts) and N (Climate Change).

Response to Comment #251-03:
Section 3.3 of the DEIR (Description of the Draft GP 2020) provides the summary of projected growth in population and housing units for the County and cities, as well as the breakdown of this growth by Planning Area. Section 4.1 (Land Use, Population, and Housing) of the DEIR discusses and analyzes the impact of growth and concentration of population under Draft GP 2020. Growth in population and in housing would occur in the future as a consequence of construction of new residential units on existing lots and on new parcels created through the subdivision process.

In addition, Section 4.8 (Agricultural and Timber Resources) provides a projection of future vineyard development and related agricultural processing and support uses and agricultural tourism (Exhibit #4.8-4). This section also analyzes the impact of these uses with respect to the County's agricultural land base.

Finally, Section 5.0 (Alternatives) of the DEIR analyzes an alternative that provides a higher level of

growth than the project. This Alternative assumes that virtually 100% of the residential density in the unincorporated area will be built, that every commercial and industrial acre will be developed, and that vineyard and related agricultural support and tourism development is substantially greater than under the project.

It is not feasible in a Program EIR for a General Plan to fully determine the specific nature and intensity of the use of every lot in the County, particularly in rural areas. The methodology used in the DEIR provides a reasonable range of development potential that allows GP 2020 decision makers to evaluate policy alternatives with full knowledge of the broad, countywide environmental consequences. See also Master Response C (Program EIR/Level of Detail) and Master Response J (Buildout).

Response to Comment #251-04:
The analysis of the impacts of farmland conversion in Section 4.8 (Agricultural and Timber Resources) is conducted at the countywide scale, a level of detail appropriate for a County General Plan. See also Master Response C (Program EIR/Level of Detail). Further, it is entirely speculative that parcel size in agricultural areas would increase or decrease the rate of conversion. First, residential densities on agricultural lands are already low, ranging from 10-320 acres per unit. Second, agricultural support uses and agricultural tourism are determined more by the economic viability of agricultural production rather than by parcel size, particularly since these uses are required by Draft GP 2020 to be secondary and proportional to agricultural production. Third, waste disposal at an agricultural processing facility is necessarily land extensive. As a result, the likelihood that agricultural land would be converted for agricultural processing (and events) may actually be greater on larger parcels.

Response to Comment #251-05:
This comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comments have been submitted to the Planning Commission for consideration. However, the following responses should be noted.

Questions 1-3: Since the project is limited to a Policy review of the General Plan with only minimal consideration of land use plan amendments, analysis of an alternative that substantially reduces residential densities does not meet basic project objectives as described in Section 3.2 (Project Objectives and History). See also Master Response H (Rancge of Alternatives) and Master Response I (Land Use Changes).

Question 4.1: The adoption of policies that would explicitly allow conversions of agricultural land would likely increase conversions simply because a mitigation requirement can be interpreted to mean that conversion is consistent with the General Plan as long as mitigation is provided.

Question 4.2: Such a policy would not only be difficult to administer, but would open the door to smaller parcel sizes on the best agricultural land, thereby increasing conversion.

Question 4.3-4.5: All of these measures are already included in Draft GP 2020.

Question 6: These goals, objectives, and policies are already included in Draft GP 2020.

Response to Comment #251-06:
The 75% rule has been considered and rejected due to issues related to the viability of agricultural production and difficulty in enforcement. Section 5.0 (Alternatives) of the DEIR analyzes the Mitigated Alternative, which assumes that the 75% rule is adopted. Exhibit #5.0-2 compares the impacts of this alternative to those of Draft GP 2020.

Response to Comment #251-07:
An analysis of economic considerations, such as compensating landowners for stream setbacks, is not required by CEQA. The Sonoma County Agricultural Preservation and Open Space District is one of many entities that could become involved in the acquisition of proposed streamside conservation zones, provided that such purchases are found consistent with the District's Acquisition Plan. Transfer of

development rights is another option for landowners that has been supported in the existing General Plan, but has never been utilized or effective due to the difficulty in finding acceptable "receiver sites" where density can be increased. The difference in development potential based upon variations in streamside conservation zones cannot be determined on every affected parcel in the County since so many environmental factors can affect the way that each parcel is developed. The setback itself would not have an impact, other than the loss of agricultural land identified in Section 4.8 (Agricultural and Timber Resources) of the DEIR. However, as noted in Section 5.0 (Alternatives), the impacts of Draft GP 2020 land uses and development on flooding, water, erosion, biological resources, etc. would likely be less if conservation zones are increased.

Response to Comment #251-08:
The lands that are available for visitor serving uses under Draft GP 2020 are identified on the Draft GP 2020 land use maps for each of the nine planning areas. Lands designated as Recreation and Visitor Serving Commercial on these maps are the primary areas designated and zoned for hotels, motels, and other visitor serving uses. Lands designated Public/Quasi-Public can be used for events that are offered by public agencies, such as the Veterans Halls managed by the County Regional Parks Department. Parcels designated as agricultural lands, and to a lesser degree, lands designated Resources and Rural Development and Rural Residential are other locations where special events may be approved by permit. Events on agricultural land are limited by Draft GP 2020 to those which support agricultural production.

To determine the number of parcels and/or facilities that could be developed would entail exhaustive research into the economics of the event business and the specific physical constraints of thousands of properties and the result would be highly speculative in any case. However, the DEIR makes an effort to determine the likely extent of these uses, concluding that most events on agricultural land would be associated with wineries. Future winery development is estimated under Impact #4.8-2 of the DEIR and that estimate is used in the broad conclusion regarding the level of impact on a countywide basis.

The Valley of The Moon Association (VOTMA) Study referenced in the comment was a detailed study of parcels that presumably could be physically developed. It did not include an analysis of such constraints as septic capability, or water availability, of the economic feasibility of such development, or of the possibility that events on these lands would be allowed under Draft GP 2020 policies that the events be related to agricultural production.

The comment rejects the description of proposed future winery development in the DEIR Exhibit #4.8-4 as underestimating the expansion potential of wineries. Interestingly, members of the wine industry have also testified that they think the DEIR overestimates this potential expansion. However, in recognition of the fact that the projected expansion could theoretically be exceeded, the DEIR examined a greater level of future agricultural processing and support uses under the Buildout Alternative in Section 5.0 (Alternatives). This alternative assumed a 30% increase in vineyard cultivation over the proposed project. This increase would lead to a greater demand for processing facilities than are projected under Draft GP 2020.

The comment also suggests that a prohibition on future subdivisions of large agricultural parcels would reduce the impacts of visitor serving uses. Not only would this mitigation measure be ineffective in reducing future events, it is not consistent with the basic Draft GP 2020 objective to leave the land use maps unchanged. See Master Response I (Land Use Changes). The effectiveness of this measure is doubtful because the size of a parcel of land has little, if any, bearing on its potential for accommodating visitor serving uses. In fact, larger parcels may be more likely to support events. In addition, proposed events on smaller parcels would experience more difficulty in meeting event permit requirements for septic suitability, water supply, parking, etc. More importantly, however, the legal or technical justification for an outright prohibition has not been established, particularly given the viability of agriculture on relatively smaller parcels in Sonoma County.

Response to Comment #251-09:
Draft GP 2020 and the DEIR include the policy recommended by the comment. Agricultural tourism uses are allowed and, in fact, encouraged in Section 2.6 of the Agricultural Resources Element, but that

encouragement is balanced by limitations. Policy AR-6a, for example, requires that visitor serving uses be secondary and incidental to local agricultural production. Such a requirement means that, in the long run, a winery on every parcel is neither allowed by the Draft GP 2020 nor economically feasible.

Response to Comment #251-10:
Comment noted. The DEIR provides an analysis of the likely impacts of the Draft GP 2020 rather than providing a description of what the County will look like. The best picture of what the County would look like in the future is provided by the Land Use Maps in Draft GP 2020.

Response to Comment #252-01:
See Master Response A (DEIR Review Period) and Master Response G (Recirculation).

Response to Comment #252-02:
See Master Response E (Extent of Significant Impacts).

Response to Comment #252-03:
Comment noted. The comment has been provided to the decision making bodies for consideration. See also Master Response E (Extent of Significant Impacts).

Response to Comment #252-04:
Comment noted. See the following responses to comment letter #252.

Response to Comment #252-05:
The DEIR identifies and examines three alternatives to the Draft GP 2020. The alternatives consist of a range of policy options at a countywide level of detail appropriate for a General Plan and Program EIR. In accordance with CEQA requirements, these alternatives provide decision makers with both a less restrictive (relatively greater impacts) and a more restrictive (relatively less impacts) than the project. Also examined is the No Project Alternative wherein the County would continue to follow the existing General Plan.

The Mitigated Alternative is identified as the Environmentally Superior Alternative and it offers policy options that would reduce the proposed project's environmental impacts. See also Master Response E (Extent of Significant Impacts) and Master Response H (Range of Alternatives).

Response to Comment #252-06:
See Master Response D (Effectiveness of Mitigation Measures). Since the comment is not specific about the policies which are criticized, it is not possible to respond in each instance. However, many of the goals, objectives, and policies in the Draft GP 2020 are dependent upon water providers, cities, regional, state, and federal governments, and other special districts to carry out. As these jurisdictions are not under the control of the County, they cannot be compelled to act on proposed policies or programs. In addition, policies and programs that attempt to reduce the impacts of land uses and development that have already occurred depend upon voluntary efforts of citizens rather than imposition through the County's permitting and environmental review process. See also response to comment #6-18.

Response to Comment #252-07:
Comment noted. A copy of the draft policies was provided to the Planning Commission for its consideration.

Response to Comment #252-08:
See Master Response D (Effectiveness of Mitigation Measures) and response to comment #252-06. The major goals, objectives, and policies that express the County's vision and will guide its land use decisions through 2020 are included in Section 2.1 of Draft GP 2020 Land Use Element.

Response to Comment #252-09:
The comment has been provided to the decision making bodies for consideration. See also Master Response D (Effectiveness of Mitigation Measures) and E (Extent of Significant Impacts).

Response to Comment #252-10:
The DEIR addresses these individual and cumulative impacts in three ways. Those impacts that result from the cumulative land uses and development within the entirety of the unincorporated area are addressed in each impact section throughout Chapter 4 of the DEIR. Those impacts that result from the combination of land uses and development within the County unincorporated area plus the nine cities (and in some cases neighboring counties) and identified cumulative development projects are addressed in Section 6.2 (Cumulative Impacts). Those impacts which result from alternative policy choices in Draft GP 2020 are addressed in the alternatives analysis in Chapter 5.0 (Alternatives). See also Master Response B (Jurisdiction). The comment's statement that the County supplies water to accommodate growth is incorrect. Public water suppliers, such as the Sonoma County Water Agency and other Special Districts, are not under the jurisdiction of the County.

Response to Comment #252-11:
The Draft GP 2020 includes numerous goals, objectives, and policies which set forth the framework for the County's future actions and decisions regarding protection of resources, consistent with its jurisdictional limitations. The suggested policies supporting the County working with other jurisdiction and stakeholders are already embodied in many of the Draft GP 2020 Elements, such as Section 3.3 of the Water Resources Element and Section 3.2 of the Open Space and Resource Conservation Element. The suggested acknowledgment and declaration does not appear to provide any effective additional mitigation that would reduce impacts beyond what is already included in Draft GP 2020, particularly since Sonoma County does not have the authority to "assure" the actions of other jurisdictions. See also Master Response B (Jurisdiction).

Response to Comment #252-12:
The DEIR addresses the impacts of Draft GP 2020 on water resources, air quality, visual resources, and biological resources in Sections 4.5 (Hydrology and Water Resources), 4.3 (Air Quality), 4.11 (Visual Resources), and 4.6 (Biological Resources) respectively.

Section 4.9 (Public Services) addresses the impacts of Draft GP 2020 on water supplies. In this section, the DEIR lists policies that would, over time, reduce the impacts on water resources through a three step strategy of improved data collection regarding groundwater conditions, periodic reporting of problem areas, and management actions designed to address the identified problem. In addition, the alternatives in Section 5.0 (Alternatives) include the Mitigated Alternative, which analyzes impacts of Draft GP 2020 if no increase in water supply capacity were to occur. See also Master Response H (Range of Alternatives).

Gravel mining is one of the land uses included in the land uses and development under Draft GP 2020 and is therefore addressed in each of the DEIR's topical sections at a level of detail commensurate with a General Plan EIR.

The suggested policies and mitigations are similar in effect to the Draft GP 2020 proposed goals, objectives, and policies and therefore do not provide any effective additional reduction in the impacts of Draft GP 2020 on water resources. For example, Goal WR-1 provides for protection of the quality of surface water and groundwater, Objective WR-2.1 calls for managing groundwater on a sustained yield basis, and Goal WR-6 calls for sound management of water resources. See also Master Response Q (SCWA Water Project) and Master Response S (Water Supply).

Response to Comment #252-13:
Diversions from the Eel River to Lake Pillsbury and then to the Russian River are an existing condition resulting from PG & E's operation of its Potter Valley hydroelectric plant (described on DEIR page #4.9-5), and thus is part of the baseline. The proposed project does not propose or rely on any increase in diversions from the Eel River to supply the development and uses that will likely occur under Draft GP 2020. Indeed, as described in Section 4.9 (Public Services) of the DEIR, water from the Agency accounts for only a very small portion of the water supply for Draft GP 2020, as the majority of water from this system serves land uses and development within the cities. See also Master Response S (Water

Supply).

Response to Comment #252-14:
Contrary to the comment, the DEIR concludes that there is a significant unavoidable impact related to the increased demand for water supplies for urban areas, primarily due to the lack of certainty over the long term availability of water supplies and the lack of County jurisdiction over public water suppliers. In addition, the DEIR concludes that the increased demand for groundwater would result in a significant unavoidable impact due to the uncertainty about the existing groundwater conditions and the future effectiveness of the policies in the Draft Water Resources and Public Facilities and Services Elements.

Response to Comment #252-15:
See response to comment #235-03 regarding uncertainties of Sonoma County Water Agency supply. The likely impacts of alternative water supplies for the growth and development under Draft GP 2020 are addressed in the DEIR in Section 4.9 (Public Services) under Impacts #4.9-1, #4.9-2, and #4.9-3, as well as in Section 4.5 (Hydrology and Water Quality) under Impacts #4.5-5, #4.5-6, and #4.5-7. This information is supplemented by Master Response S (Water Supply). The proposals listed in the comment are considered as part of the land uses and development under Draft GP 2020 and their impacts are addressed in each of the topical sections of the DEIR. In addition, their specific impacts will be addressed as part of the environmental review conducted for the project at the time that it is considered. See also Master Response B (Jurisdiction), Master Response P (Urban Water Management Plan), Master Response Q (SCWA Water Project), Master Response U (Climate Change), and Master Response G (Recirculation). With respect to the Agency's "low flow" proposal, see response to comment #252-28.

Response to Comment #252-16:
Heavy metals are included the contaminants identified in the updated 303(d) listing of impaired water bodies. The RWQCB staff has identified some increased levels of heavy metals in the Russian River, but has not identified the source (personal communication, David Lehland, RWQCB). With respect to MTBE, the following paragraph on pages #4.5-16 and #4.5-17 in Section 4.5 (Hydrology and Water Resources), is revised as follows:

> "Overall, Sonoma County is predominantly rural, with relatively few areas of intense development. Although anthropogenic land use changes have negatively impacted the water quality of some waterways in the county, water in the county is generally considered to be of good quality. While the EPA and the RWQCBs do not compile a list of waterways that have good water quality, they do compile a list of waterways that do not meet the water quality standards set forth by the EPA. The seven waterways in Sonoma County that have been placed on a Section 303(d) list by either the RWQCBs or the EPA are listed in Exhibit #4.5-3. These waterways are as follows: Estero Americano; Gualala River; Russian River; Stemple Creek; Big Sulphur Creek; Petaluma River; and Sonoma Creek. Additionally, San Pablo Bay, which receives water from the Petaluma River and Sonoma Creek, has also been listed as an impaired water body for thirteen constituents. TMDL planning, which will address the water quality issues identified, is in the early stages of development for most of these watersheds. The most prominent water quality problems affecting waterways in the county are: (1) sedimentation and siltation; (2) nutrients; and (3) pathogens, or high bacteria levels. **Other problems include periodic contamination by the fuel additive MTBE (methyl tertiary-butyl ether) in Lake Sonoma."**

This information is supplemental to the information in the DEIR and does not change the DEIR's conclusions regarding water quality impacts from all Draft GP 2020 land uses and development, which are addressed in Section 4.5 (Hydrology and Water Resources) under Impacts #4.5-1, #4.5-2, #4.5-3, and #4.5-4. See also Master Response T (Listing of Impaired Water Bodies).

Response to Comment #252-17:
Comment noted. The County's current and proposed grading and erosion control ordinance and ministerial permit process address storm water pollution issues in rural areas. In addition, Draft GP 2020 includes policies in the Open Space and Resource Conservation Element (such as ORSC-8d) and in the

Water Resources Element (Section 3.1) that also address water quality issues in rural areas.

Response to Comment #252-18:
See response to comment #14-02. The water quality impacts of Draft GP 2020 resulting from wastewater disposal are addressed in Section 4.5 under Impact #4.5-4 rather than #4.5-1. The comment's suggestions regarding other agencies' strategies and policies to address pollutants in wastewater have been forwarded to the decision making bodies for consideration.

Response to Comment #252-19:
See response to comment #14-02. The DEIR analyzes more restrictive water quality policies under the Mitigated Alternative in Section 5.0 (Alternatives). Policies in Section 3.1 of the Draft GP 2020 Water Resources Element are fully effective in reducing impacts to a less than significant level.

Response to Comment #252-20:
The requests for a series of maps showing the jurisdictions of hundreds of jurisdictions and special districts (including water districts, sanitation districts, flood management, fire protection, schools, ambulance, hospital, etc.) is a major undertaking and well beyond the scope of the DEIR. The DEIR identifies the key public service providers in Section 4.9 (Public Services).

Response to Comment #252-21:
The DEIR refers to the Draft GP 2020 land use maps for each of the nine Planning Areas in order to present the maximum possible land uses and development allowed by the proposed plan. The location of older lots that might be recognized as legal in the future is not known and is not feasible to determine without years of exhaustive research into individual property histories. Also, the DEIR addresses the impacts of the theoretical holding capacity of the Draft GP 2020 Land Use Maps under the Buildout Alternative in Section 5.0 (Alternatives). See also Master Response I (Land Use Changes) and Master Response J (Buildout) and Master Response H (Range of Alternatives).

Response to Comment #252-22:
The DEIR assumes that the cities will follow their General Plans, which include urban boundaries that establish the growth limits of each jurisdiction. Whether or not these boundaries are enforced by voter approval or by the decisions of each City Council, the General Plans are a reasonable basis upon which to evaluate the cumulative impacts of future growth in the County.

Response to Comment #252-23:
The Sonoma County Agricultural Preservation and Open Space District and its Expenditure Plan were reauthorized in the 2006 election. Draft GP 2020 continues to support extension of these measures whenever they come up for reauthorization. This DEIR addresses the impacts of Draft GP 2020, not the impacts of the loss of the District and its Expenditure Plan.

Response to Comment #252-24:
With respect to the suggested policies and mitigation measures regarding diversion of the Eel River water to the Russian River, the decision whether or not to allow PG&E to continue to divert water from the Eel River will be made by the federal agencies responsible for the project and not by the Sonoma County Water Agency or the County of Sonoma. See also response to comment #252-13.

Regarding the suggested policies and mitigation measures related to wastewater discharge to ground and surface waters, the Draft GP 2020 includes numerous goals, objectives, and policies that would help enhance the quality of treated wastewater and protect any applicable receiving waters in conformance with all regulations and standards of the Regional Water Quality Control Boards. However, the suggested commitment to completely evaluate all discharges to any water in Sonoma County is neither technically possible nor financially feasible. In addition, many wastewater providers in Sonoma County are not under the jurisdiction of the County, thereby reducing the effectiveness of such policies. The DEIR concludes that the potential impact to water quality from wastewater disposal will be less than significant with the implementation of the policies and programs already included in Draft GP 2020.

Response to Comment # 252-25:
The impacts of mining operations on water quality is analyzed as part of all land uses and development under Draft GP 2020 in Section 4.5 (Hydrology and Water Resources) of the DEIR under Impact #4.5-3, rather than under Impact #4.5-2. Contrary to the comment, Draft GP 2020 Objective OSRC-13.1provides a program-level regulatory approach to instream mining operations that requires numerous measures to avoid water quality impacts and downcutting of the river channel. The ARM Plan has progressively addressed these issues since its adoption in 1981.

Compliance with this plan means that the water quality and quantity impacts of instream mining are avoided or mitigated. In addition, operations must comply with the requirements of the US Army Corps of Engineers and the Regional Water Quality Control Boards. Each operator must apply for a 401 permit from the RWQCB and implement a Stormwater Pollution Plan and a spill prevention and response plan, as well as the terms of County's 3836R permit to minimize roiling of the waters.

The level of detail of the DEIR is appropriate for a Program EIR addressing impacts at a countywide scale. It is not feasible at that scale to address the detailed impacts of every project that might take place. Furthermore, the impacts of projects that are proposed in the future that are subject to discretionary review, both public and private, would be addressed in detail at the time that they are proposed. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #252-26:
Impact #4.7-9 of the DEIR addresses the impacts of Draft GP 2020 land uses and development on the availability of mineral resources in the future, rather than the impacts of mining uses on the environment. These impacts are avoided by Draft GP 2020 Policy OSRC-13c which calls for review of projects near designated mineral resource areas so that the resource areas are conserved.

The excerpt from *California Rivers and Streams* has very limited applicability to the DEIR assessment in that it is a general assessment of potential adverse impacts that may result from some instream mining. It does not take into consideration the effectiveness of instream mining standards imposed by the ARM Plan. The statement that operators tend to mine sediment faster than it is replenished currently has no basis in Sonoma County where monitoring data has shown that under the current regulations, gravel recharge is exceeding extraction. Evidence supporting these conclusions is available in the reports, entitled "Annual Monitoring Program Results - Russian River, Sonoma County, California," prepared under the auspices of the County's ARM Plan monitoring program. These reports are on file in the PRMD offices and available for review for each applicable year.

In addition, the ARM Plan is still actively being utilized as the County's policy document for management of mining operations and will continue to be applied to all future mining operations. Its policies and programs provide the mechanism for the County to consider cumulative impacts of all mining operations and other uses on the conditions of the river system as these impacts are analyzed in the CEQA documents for specific projects.

While it is true that ESA listing occurred after adoption of the ARM Plan, these species were recognized as special status species by the ARM Program EIR and appropriate mitigation measures considered and adopted. The listing therefore does not change the EIR's conclusions regarding significance. Furthermore, the ARM Plan requires operations to comply with all other applicable Federal and State laws and permit requirements including the Endangered Species Act and the Clean Water Act. Under the ESA each mining operation which requires a Corps permit is subject to review by the NOAA's National Marine Fishery Service (NMFS) to determine through a "Biological Opinion" what if any additional measures or restrictions should be imposed on the operation to avoid "take" (including adverse impacts on the species habitat) of the endangered species.

Response to Comment #252-27:
The excerpts from Curry, Dunne, Leopold and Freeman were considered along with other expert opinion during the preparation and public hearings for the 1994 update of the ARM Plan and its Program EIR. The potential groundwater/aquifer impacts were one of the major reasons, along with loss of farmland,

that the ARM Plan limits terrace mining to not more than 100 acres on each side of the river and imposes size, setback, spacing, and other requirements. Draft GP 2020 continues the County's reliance upon the ARM Plan to establish areas for mining and to set forth the policies, procedures and standards for mining. Draft GP 2020 does not propose any policies which depart from its past mineral resource policies. Any discussion or environmental review of these detailed policies is more appropriate if and when amendments to the ARM Plan policies are considered or as part of the review of specific proposed mining operations.

Since the proposed project is a General Plan, the level of detail of the DEIR is appropriate for a Program EIR addressing impacts at a countywide scale. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #252-28:
The referenced project is not proposed by or under the jurisdiction of the County of Sonoma. However, it is part of the land uses and development that could occur under Draft GP 2020. The alternative involving a reduction in the minimum flow levels and an off-stream pipeline system is not "in development" and is simply an option that may be considered in the future by the Sonoma County Water Agency in response to concerns about the impact of water diversions from the collectors near Wohler Bridge on fishery resources. Accordingly, SCWA's implementation of the project is speculative and need not be considered in the Draft GP 2020 DEIR. See also Master Response B (Jurisdiction), Master Response Q (SCWA Water Project), and Master Response C (Program EIR/Level of Detail).

Response to Comment #252-29:
This comment presents a list of potential gravel mining impacts as presented by Dr. Curry. These potential impacts were considered over 10 years ago during the preparation and adoption of the 1994 ARM Plan policies and the associated Program EIR. Mitigations identified in the 1994 Program EIR were subsequently adopted as mining standards in the ARM Plan. Draft GP 2020 policies use the ARM Plan to establish detailed policies, procedures and standards which among other requirements require the environmental impacts of each mining proposal to be assessed in a more thorough and detailed site specific environmental review at the time of application. Objective OSRC-13.1 and Policy OSRC-13a provide support for use of the ARM Plan and Program EIR to address the environmental impacts of specific mining operations. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #252-30:
See response to comment #252-26. Since Impact #4.7-9 on page #4.4-31 is less than significant, no additional mitigation measures are required. Furthermore, the suggested policy mitigation measures would not appear to be effective in reducing the impacts of Draft GP 2020 on the loss of mineral resource lands. Ending gravel mining in the County would likely result in the need to import aggregate materials from locations outside the County, resulting in environmental impacts in those locations as well as additional traffic impacts from the lengthier hauling.

Response to Comment #252-31:
See response to comment #252-06.

Response to Comment #252-32:
This policy addresses attempts by state and federal agencies to shift administrative responsibility for their regulatory programs to the County without corresponding funding. It is not possible to predict how this policy would be specifically applied to future mandates of state or federal government. However, it would not enable or allow the County to avoid implementation of any requirements imposed by such agencies. Most likely, it would provide a basis for the County to seek, and perhaps obtain, funding for implementation of such mandates. Nonetheless, this policy would have no bearing upon the County's implementation of its own Draft GP 2020 goals, objectives, and policies related to water quality, and therefore, no effect on the conclusions of the DEIR.

Response to Comment #252-33:
The existing text under Surface Water on Page #4.9-3 of the DEIR is correct as written and provides

sufficient background information for the reader to understand the setting. See also Master Response S (Water Supply) and Master Response Q (SCWA Water Project).

Response to Comment #252-34:
Section 4.9 (Public Services) of the DEIR provides an analysis of future water demand for the unincorporated County, including unincorporated areas supplied by the SCWA and other public water suppliers, private companies, and individuals. As noted, this analysis was prepared by PRMD staff. In the unincorporated area, no water suppliers are required to prepare and adopt an Urban Water Management Plan (UWMP) under the California Code. The SCWA is required to prepare a UWMP for its service area, which includes the Forestville Water District, the Valley of the Moon Water District, and many other retail suppliers. The DEIR relies upon the most recent information available from the SCWA and the applicable General Plans to identify the water demands of the contractors in the cities and in Marin County. See Master Response P (Urban Water Management Plans).

Response to Comment #252-35:
See Master Response Master Response Q (SCWA Water Project) and Master Response S (Water Supply).

Response to Comment #252-36:
Section 4.9 (Public Services) of the DEIR addresses water supplies in all unincorporated areas of the County, including areas served by the SCWA and other public water suppliers, as defined in Draft GP 2020. These include private water companies that provide public water supplies. This section also addresses the adequacy of all water supplies provided by individual companies or wells that are not included in the definition of public water suppliers. See also Master Response S (Water Supply).

Response to Comment #252-37:
These data were based upon the most recently adopted UWMP available at the time of the DEIR's publication. See Master Response P (Urban Water Management Plans) for updated figures and assessment based upon the 2005 UWMP approved by the Agency in December 2006.

Response to Comment #252-38:
See response to comment #218-43.

Response to Comment #252-39:
This comment pertains to the efficiency of the conservation programs of the Sonoma County Water Agency and its contractors and not to the Draft GP 2020 or the adequacy of the DEIR. However, contrary to the comment, the DEIR considers water conservation and efficient use in its analysis of water supplies in Section 4.9 (Public Services), under Impact #4.9-1. Also, additional conservation and re-use policies have been included in Section 3.4 of the Draft GP 2020 Water Resources Element. See also response to comment #7-02.

Response to Comment #252-40:
Section 4.9 (Public Services) of the DEIR referenced in the comment makes it clear that the SCWA has sufficient water supplies from Lake Sonoma, but does not yet have approval from the SWRCB to divert its full entitlement from the river.

Response to Comment #252-41:
See response to comment #235-03, #252-13 regarding effects on the Eel River, Master Response Q (SCWA Water Project), Master Response S (Water Supply), and Master Response G (Recirculation. In addition, the first paragraph of page #4.9-5 is revised as follows:

> "Diversions from the Eel River….National Marine Fisheries Service (NOAA-NMFS). In 2004, FERC issued a final decision that **was expected to** reduce~~d~~ the amount of diversions from the Eel River into the Russian River by approximately 15 percent to protect Eel River fisheries. This decision…or in meeting minimum streamflow requirements. **However**, **the reduction in Eel River diversions resulting from the 2004 FERC decision, as implemented by PG&E, may be**

more than 15%. ~~Although~~ There is **thus** some uncertainty surrounding this issue ~~because the FERC decision is being appealed~~. **However**, there are no additional proposed reductions pending before FERC."

Response to Comment #252-42:
These factors are listed in the prior subsection, beginning on Page #4.9-2. See also response to comment #235-03. In addition, due to the evolving decisions regarding the listing of coho salmon, Chinook salmon, and steelhead, the second paragraph on page #4.9-5 is revised as follows:

"Another uncertainty facing the SCWA's water supply is related to the recent listings of coho salmon, Chinook salmon, and steelhead ~~as threatened~~ under the Endangered Speciess Act.

Response to Comment #252-43:
The issues and uncertainties regarding the Sonoma County Water Agency's supply are discussed in the subsection prior to the one referenced in the comment, beginning on Page #4.9-2. The section on Page #4.9-11 is a general section describing the factors affecting supplies in the unincorporated area that do not rely upon the SCWA. The factors listed in this section actually comprise a broader range of general factors rather than those specific to the Russian River.

Response to Comment #252-44:
See response to comment #252-43 regarding the DEIR's discussion of the uncertainties of the Sonoma County Water Agency's supply. The discussion under Impact 4.9-1, which analyzes water supplies for the urban service areas, discusses the Draft GP 2020 policies that encourage alternatives to increased supply from the Agency, including improvements in water use efficiency, water reuse and reclamation, and water conservation. Section 5.0 (Alternatives) of the DEIR provides an analysis of the Mitigated Alternative, which assumes that there is no expansion of water and sewer capacity. Section 6.2 (Cumulative Impacts) acknowledges the potential cumulative impacts to water supply at an appropriate level of detail of a General Plan and associated Program EIR. See Master Response S (Water Supply) for further discussion of alternative future water supplies. See also Master Response C (Program EIR/Level of Detail) and Master Response H (Range of Alternatives).

Response to Comment #252-45:
This comment merely quotes the DEIR. No response is required.

Response to Comment #252-46:
See Master Response O (SB 221 and SB 610) and Master Response S (Water Supply). As noted in the response to comment #252-44, the DEIR includes an alternative which assumes no expansion of water supply capacity. The DEIR and Draft GP 2020 identify goals, objectives, and policies which would assist the public water suppliers in meeting future water supply needs. However, the DEIR acknowledges that supply may not be adequate to serve projected growth and therefore finds water supply impacts may be significant and unavoidable. Although there is uncertainty regarding the availability of groundwater and surface water supplies to meet future rural and urban demand, justification for a moratorium on development has not been established, particularly with respect to groundwater supplies. The Draft GP 2020 Water Resources Element includes Policy WR-3i that supports a moratorium if water supplies are determined to be inadequate. If such scientific justification were to be established, the General Plan, as a broad policy document, would not be the appropriate mechanism for adopting a moratorium. In addition, current development review procedures of the County allow a water supplier to inform the County prior to project approval if water supplies are not available to serve the project, in which case the project would either not be approved or would be conditioned to assure that a water supply was secured before the project could be constructed.

Response to Comment #252-47:
Comment noted. However, there is no evidence known to the preparers of the DEIR of an overdraft condition in Sonoma that approaches the conditions in the other areas cited. Contrary to the comment, the Draft GP 2020 includes a new Water Resources Element that formulates a long term strategy to address water resource issues on a sustainable basis. See also Master Response N (Climate Change).

Response to Comment #252-48:
Although the 3Rs alternative suggested in the comment is only theoretical and applies primarily to the water supply activities of the Sonoma County Water Agency (SCWA) rather than the Draft GP 2020, it appears to be quite similar to the Mitigated Alternative analyzed in Section 5.0 (Alternatives) of the DEIR. In addition, as the following discussion shows, the alternative offers little in terms of new policies that are not already part of Draft GP 2020.

The "Resources Stewardship and Efficiency Component offers an approach to the SCWA water supply strategy based almost entirely upon conservation and demand reduction. While the County of Sonoma does not have jurisdiction over the SCWA, the Draft GP 2020 and DEIR include goals, objectives, and policies that emphasize conservation through:

1. Recycling and reuse programs for solid waste in Section 3.5 of the Public Facilities and Services Element;

2. Energy demand reduction in Section 7 of the Open Space and Resource Conservation Element;

3. Water conservation in Section 3.4 of the Water Resources Element.

See also response to comment #7-02.

The "Restoring the Russian River and Eel River Component" offers the suggestion that the SCWA modify its Russian River System to reduce demand, alter the route of water delivery to recharge the Middle Reach aquifer, and end the Eel River diversion. This would be an alternative SCWA water supply strategy and PG&E power supply strategy that is not an alternative to Draft GP 2020 and not a decision that is under the jurisdiction of Sonoma County.

A related suggestion included in this component would be for the County to end the mining of aggregate materials in the Middle Reach aquifer in order to increase its capability to filter and store drinking water. Such a policy is already an essential element of the County's Aggregate Resources Management Plan, incorporated by reference into the Draft GP 2020. This Plan's policies do not allow new instream mining operations in the Russian River downstream of the mouth of Dry Creek. In addition, the Plan calls for a cessation of all new terrace mining operations in this aquifer effective in 2006.

The third component of the suggested alternative involves a comprehensive change in the County's economic base from one that is commodity based to one that is service based. Actually, Sonoma County's economy is a well-balanced mixture of both basic and service businesses that allows the economy to better withstand typical economic cycles that affect many other areas. In fact, a resource based economy such as that in Sonoma County provides much better assurance that jobs will stay in the County. Service based businesses are more mobile with a greater risk of job loss. In any case, the comment offers little in the way of specific policy options and no description of the ways that such an alternative would reduce the countywide impacts of Draft GP 2020. See also Master Response H (Range of Alternatives).

Response to Comment #253-01:
The traffic impacts of Draft GP 2020 land uses and development are identified in Section 4.2 (Transportation) of the DEIR, including the addition of sites that are needed in order to provide opportunities for affordable housing pursuant to the Housing Element. These impacts are addressed at a program level of detail appropriate for a countywide General Plan. The project specific impacts will be analyzed in the environmental document prepared at the project level. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #253-02:
Sewer and water capacity issues are addressed in Section 4.9 (Public Services) of the DEIR, particularly Impact #4.9-4 (Increased Wastewater Treatment Demand). These impacts are addressed at a program

level of detail appropriate for a countywide General Plan. The project specific impacts will be analyzed in the environmental document prepared at the project level. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #254-01:
Section 4.2 (Transportation) of the DEIR discusses Air Traffic Safety under Impact #4.2-6. The discussion notes that existing public use airports are subject to the regulations of the Comprehensive Airport Land Use Plan (CALUP). The CALUP shows specific required flight patterns for each of the airports to minimize noise and safety impacts, including the Sonoma County Airport. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #254-02:
The impacts of Draft GP 2020 on roadway congestion are addressed in Section 4.2 (Transportation) of the DEIR under Impacts #4.2-1, #4.2-2, #4.2-3, and #4.2-4. These impacts are identified as significant and unavoidable. The comment refers to Impacts #4.2-8 and #4.2-9 which address parking and emergency access rather than congestion.

Response to Comment #254-03:
The comment offers no analysis or data to support the claim that emission from flight operations will be significant. Draft GP 2020 Air Transportation Element Policies AT-5b and AT-5e limit annual operations at the Sonoma County Airport to 255,200 annual operations, including 15,200 for commuter and scheduled airline service and 240,000 for general aviation. 550,000 operations is the ultimate design capacity of the airport. The DEIR addresses the impact of these operations on air quality in Section 4.3 (Air Quality) under Impact #4.3-5 (Aircraft Emissions). The impact analysis relies upon the existing and future emissions for the region utilized by the California Air Resources Board (CARB). In the case of Sonoma County Airport, this inventory is utilized by the Bay Area Air Quality Management District (BAAQMD) in developing its Clean Air Plan.

The DEIR concluded that the air quality impact of future aircraft operations is less than significant. This conclusion resulted from the fact that aircraft emissions were included in the emissions inventory utilized by the CARB for the BAAQMD Clean Air Plan and thus are not expected to impeded compliance with air quality standards. However, upon consultation with the BAAQMD staff, neither the CARB inventory nor the BAAQMD Clean Air Plan included emissions from commercial airline service at Sonoma County Airport during the time frame of Draft GP 2020. This assumption was likely based upon the lack of air service at the time as well as the uncertainty surrounding all future airline services in the post 9/11 environment. The inventory did include the projected general aviation operations, which comprises the bulk of aircraft operations at the Airport.

In light of this assumption, an additional analysis was performed of future aircraft emissions if all of the aircraft operations allowed in the Draft GP 2020 Air Transportation Element were to take place by 2020. This analysis identified a higher forecast level of ROG, NOx, and CO emissions resulting from Draft GP 2020. However, the increased level of emissions is not considered to result in a change in the conclusions of the DEIR that Impact #4.3-5 is less than significant. This conclusion is based upon the following:

First, the BAAQMD provided the following data for a revised Exhibit #4.3-6 to reflect updated forecast emission data for year 2005 through 2020 for the general aviation forecast without commercial airline service. The increase in ROG and NOx is likely due to revised assumptions about the mix of general aviation aircraft using the airport.

Forecast Aircraft Emissions for Sonoma County Airport without commercial airline services (tons/day)

Year	ROG	NOx	CO
2005	0.08	0.03	1.55
2010	0.08	0.04	1.71
2020	0.10	0.04	1.87

Then, forecast emissions were calculated for the addition of commercial airline services. These emissions were based upon two possible aircraft, the smaller Turboprop aircraft and the larger Turbojet aircraft that are being considered for future service by the Airport. The Table shows the emission levels assuming that each of the aircraft were to occupy all of the allowed allocations in the ATE.

2020 Forecast Aircraft Emissions for Specified Aircraft (tons/day)

	ROG	NOx	CO
PW150A Turboprop	N/A	0.058	1.896
V2527-A5 Turbojet	0.001	0.220	1.997

The following Table shows the combined total emissions for the Sonoma County Airport at 255,200 operations per year with either of the two aircraft.

2020 Forecast Emissions for Sonoma County Airport with General Aviation and Commercial Service (tons/day)

	ROG	NOx	CO
Turboprop	0.1 +	0.098	1.896
Turbojet	0.101	0.260	1.997

In order to determine whether or not these additional emissions would result in a significant air quality impact, the revised forecast emissions were compared to the total emissions anticipated in the BAAQMD Clean Air Plan as noted in the significance criteria listed in Section 4-3 (Air Quality). Compliance with the Clean Air Plan is the appropriate criterion for addressing the air quality impacts of local General plans. The following table compares the forecast ROG, NOx, and CO emissions under the Draft GP 2020 ATE with the forecast emissions for the entire Bay Area.

2020 Forecast Aircraft Emissions vs. BAAQMD Clean Air Plan Emissions (tons/day)

	ROG	NOx	CO
Turboprop	0.1 +	0.098	1.896
Turbojet	0.101	0.260	1.997
BAAQMD	386.6	546.9	2212.7

As can be seen from this comparison, the total emissions (including full buildout of commercial air service at Sonoma County Airport) would not represent a significant increase in aircraft emissions in the BAAQMD inventory and Clean Air Plan. Aircraft emissions would represent 0.00025% of Bay Area emissions for ROG, 0.051% for NOx, and 0.0069% for CO. Therefore, Impact #4.3-5 would remain less than significant, as noted in the DEIR.

Section 6.0 (Cumulative Impacts) of the DEIR already concludes that the air quality impacts resulting from Draft GP 2020 are cumulatively considerable. This conclusion is based, in part, on the fact that the Airport Master Plan (one of the cumulative projects) may result in a greater level of commercial air service than under Draft GP 2020. The additional emissions described above would be less than could occur under this Master Plan. However, as noted in the DEIR, the revised emission forecast would increase the cumulative air quality impact of Draft GP 2020, but not substantially.

Response to Comment #254-04:
The noise contour lines around airports are calculated from flight patterns of approaching and departing aircraft and the fleet mix. The DEIR is based upon and references the detailed noise analysis prepared for the Comprehensive Airport Land Use Plan. The comment references the impact summary in Chapter 2 of the DEIR. However, airport noise is discussed in detail in Section 4.4 (Noise) on pages #4.4-8 and #4.4-9 and under Impact #4.4-5 (Airport Noise).

Response to Comment #254-05:
The Draft GP 2020 Air Transportation Element contains policies specific to noise complaint and reporting

at the Sonoma County Airport (Policy AT-3e). Additionally, Policies AT-1a and AT-4a note that the Sonoma County Airport is also subject to specific noise policies and regulations of the Comprehensive Airport Land Use Plan and Sonoma County Airport Master Plan.). For clarification, the Airport reports that a formal request has been made to the FAA for the FAR Part 150 Noise Study. However, there is no requirement to prepare such a study for Draft GP 2020 or the DEIR. See also Master Response L (Airport Master Plan).

Response to Comment #254-06:
Future noise impacts of aircraft operations are identified in Section 4.4 (Noise) of the DEIR. These impacts are based upon projections of future general aviation and commercial jets allowed in the Draft GP 2020 Air Transportation Element. In addition, the Sonoma County Airport has an existing noise monitoring and complaint program and all future operations of the Airport are subject to noise standards of the Airport Land Use Commission's (ALUC) Comprehensive Airport Land Use Plan (CALUP). See also response to comments #254-04 and #254-05.

Response to Comment #254-07:
The comment references the impact summary in Chapter 2 of the DEIR. The discussion of the environmental setting and impacts are found in Chapter 4. Section 4.6 (Biological Resources) addresses the impacts of land uses and development under Draft GP 2020 on biological resources, including birds and nesting habitat. These land uses and development include flight operations at the Sonoma County Airport pursuant to the Air Transportation Element. Impact #4.6-4 discusses the loss of wildlife habitat and wildlife movement opportunities at an appropriate level of detail for a countywide General Plan and Program EIR. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #254-08:
It is debatable whether or not the visual impact of an aircraft departing or approaching an airport runway constitutes an adverse visual intrusion. However, the airports of the County are small. Commercial jets are limited to only one airport where the operations are limited in number. As a result, this would be less than significant impact.

Response to Comment #254-09:
The annual operations projected in the ATE for the Sonoma County Airport by 2020 is 255,200, not 550,000, as stated in the comment. The impacts of Draft GP 2020 land uses and development, including airport operations, related to hazardous materials are addressed in Section 4.13 Hazardous Materials of the DEIR under Impact #4.13-1 (Release of Hazardous Materials). In addition, hazardous materials use at the airports is subject to specific federal, state and/or county regulations for handling, transport, and disposal described in the DEIR on pages #4.13-9 through #4.13-15.

Response to Comment #254-10:
Comment noted. The County tracks population, housing, and employment growth and reports on it periodically to the State. There is no reason to change the growth figures unless they become significantly out of line with the projections. Recent newspaper reports about declining growth rates in the unincorporated area accurately portray and are consistent with the County's projections.

Response to Comment #254-11:
Traffic congestion on Airport Boulevard is addressed in Section 4.2 (Transportation) of the DEIR under Impact #4.2-1. Improvements to Airport Boulevard are proposed in the Draft GP 2020 Circulation and Transit Element to reduce congestion to an acceptable level of service.

Response to Comment #254-12:
Comment noted. The comment does not pertain to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #254-13:
Exhibit #4.2.14 lists roads that are anticipated to experience significant impacts under Draft GP 2020. Significant impacts on Airport Boulevard are reduced to a less than significant level by proposed capacity

improvements to that road. See also response to comment #254-11.

Response to Comment #254-14:
See response to comment #254-01. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #254-15:
The Draft GP 2020 Air Transportation Element allows 255,200 annual operations at Sonoma County Airport, not 550,000. See response to comment #254-03 for the revised air emission figures for this increase in the level of operations.

Response to Comment #254-16:
Comment noted.

Response to Comment #254-17:
See response to comment #254-05. Impact #4.4-5 (Airport Noise) is concluded to be less than significant, due to the noise contours, which meet the requirements of the California Airport Noise Regulations, and policies in the Draft GP 2020 Air Transportation Element (see DEIR, pages #4.4-8, #4.4-18, #4.4-29).

Response to Comment #254-18:
The noise survey methodology is sufficient for the purpose of identifying typical noise levels in areas occupied by noise sensitive land uses such as residences and schools. This methodology is standard for a countywide general plan analysis and program EIR. See also responses to comments #224-06, #237-59 and #237-60, and Master Response B (Jurisdiction) and Master Response C (Program EIR/Level of Detail).

Response to Comment #254-19:
The impact is determined to be significant and unavoidable in part due to funding constraints (see DEIR page #4.4.-22). See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #254-20:
The comment does not pertain to the adequacy of the DEIR. The Draft GP 2020 Air Transportation Element includes Objective AT-3.3 and Policy AT-3c to encourage the use of quieter aircraft in future operations. In fact, the Q400 aircraft mentioned in the comment is the one currently in use at the Sonoma County Airport.

Response to Comment #254-21:
The Draft GP 2020 Air Transportation Element includes Policy AT-3f providing for an annual noise complaint report, and, if needed, a noise monitoring program.

Response to Comment #254-22:
The comment does not pertain to the adequacy of the DEIR. ATE policies AT-5a through AT-5f provide for ongoing monitoring of air traffic passenger volumes. Noise impacts from the airport would be monitored pursuant to Policy AT-3f, described in response to comment #254-21.

Response to Comment #254-23:
The noise contours were adopted by the Sonoma County Airport Land Use Commission, and are more stringent than those required by the California Airport Noise Regulations, in recognition of the rural nature of Sonoma County, which has lower ambient noise levels than more urbanized jurisdictions (see DEIR page #4.4-8). In the event that residential development is proposed within the area designated as "conditionally acceptable", the development would be required to provide noise mitigation pursuant to the Draft GP 2020 Air Transportation Element. Contrary to the comment, the DEIR does take exterior versus interior noise levels into account in the analysis of airport noise impacts, as described on page #4.4-28.

Response to Comment #254-24:

See response to comment #254-01 and #254-05. Noise impacts of aircraft operations along flight paths outside of the CNEL contours are not considered significant due to the noise attenuation provided by the height of the aircraft above the noise sensitive uses on the ground.

Response to Comment #254-25:
Section 4.9 (Fire Protection and Emergency Services) of the DEIR addresses the impacts of Draft GP 2020 land uses and development on the provision of these services. The impact of emergency aircraft on noise and air safety is addressed in Section 4.4 (Noise) and Section 4.2 (Transportation), respectively. It should be noted that during emergency operations, the aircraft operate under conditions and protocols that are dictated by emergency procedures. Similarly, training operations are conducted based upon the applicable training procedures and locations. Neither of these operations occurs often enough to affect the cumulative noise levels generated by the overall aircraft operations at the airport.

Response to Comment #254-26:
See response to comment #254-08. The Draft GP 2020 Air Transportation Element allows 255,200 annual operations at Sonoma County Airport, not 550,000. Of the 255,200 annual operations 240,000 are general aviation aircraft. These general aviation aircraft, much smaller in size and visibility, would have even less effect on the visual environment than jets. It should be noted that annual operations at the Sonoma County Airport in 2001 were reported in the Draft Air Transportation Element Table AT-1 to be 135,000 (128,400 general aviation and 6,600 commercial airline operations).

Response to Comment #254-27:
See Response to Comment #254-09.

Response to Comment #254-28:
Comment noted. The comment does not provide an explanation as to what in Exhibit #5.0-2 is the source of the disagreement. However, should any of the responses to comments result in a relevant change to any impact conclusions that would affect this exhibit, it will be revised accordingly.

Response to Comment #254-29:
See Master Response L (Airport Master Plan).

Response to Comment #254-30:
See response to comment #254-03.

Response to Comment #254-31:
See response to comments #254-01, #254-04, #254-05, #254-06, and #254-24. See also Master Response L (Airport Master Plan).

Response to Comment #254-32:
See response to comment #254-04.

Response to Comment #254-33:
See response to comment #254-05.

Response to Comment #254-34:
See response to comment #254-05, #254-06, and #254-18.

Response to Comment #254-35:
See response to comment #254-25.

Response to Comment #254-36:
See response to comments #254-08 and #254-26.

Response to Comment #254-37:

See Response to Comment #254-09.

Response to Comment #254-38:
See response to comment #254-18.

Response to Comment #254-39:
When aircraft are outside of the immediate environs of the airport, they are no longer under the jurisdiction of Sonoma County or the Airport. Regulation of these flight patterns is therefore infeasible. Pilots are conscious of both safety and noise issues and typically take reasonable action to avoid residential and other occupied areas. The Draft GP 2020 Air Transportation Element and the ALUC's CALUP include policies and regulations to limit land uses in the airport environs that would conflict with flight patterns in the immediate vicinity of the airport, and noise impacts are accordingly concluded to be less than significant.

Response to Comment #254-40:
The information in Appendix 7.7 (Noise) is included in the DEIR and is the basis for the noise analysis in Section 4.4 (Noise). See also response to comment #254-31.

Response to Comment #254-41:
The comment incorrectly compares a single event peak noise level (86dB) from Exhibit #7.7-2 with the "population annoyance" Exhibits #7.7-3 and #7.7-4 which represent noise levels averaged over time (Ldn, CNEL). These average noise level standards take into account the sensitivity of residents who are exposed to noise sources. See also response to comment #224-06.

Response to Comment #255-01:
Water resource issues are not "casually addressed" in the Draft GP 2020. A completely new Water Resources Element is proposed. This element provides a serious policy commitment by Sonoma County to address water resource issues into the future. See also Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #255-02:
The Sonoma County General Plan is not required to include an Urban Water Management Plan (UWMP). The only entities in Sonoma County that are required to adopt UWMPs are the Sonoma County Water Agency and the cities. Nonetheless, the Draft GP 2020 includes a Public Facilities and Services Element, Water Resources Element, and Land Use Element that provide goals, objectives, and policies for management of land use, public services and infrastructure, and water resources in an integrated manner. In addition, Section 4.9 (Public Services) of the DEIR analyzes the future demand for water supplies in the unincorporated area much like a UWMP would. See also Master Response P (Urban Water Management Plans).

Response to Comment #255-03:
The Draft GP 2020 includes Objective OSRC-13.1 and Policies OSRC-13a and OSRC-13b which provide support for addressing the impacts of mining operations on the aquifer, agriculture, and biological resources. The DEIR addresses all land uses and development under Draft GP 2020, including mining operations, in each of the topical sections is Section 4 of the DEIR. Since the project is a General Plan, the level of detail is appropriate for a Program EIR addressing impacts at a countywide scale. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #256-01:
The Draft GP 2020 Open Space and Resource Conservation Element addresses cumulative habitat loss by calling for a comprehensive habitat mapping program in Policy OSRC-7i. Implementation of this program will establish baseline habitat conditions, making the assessment of cumulative habitat impacts possible. In addition, Policy OSRC-7a calls for designating areas with sensitive resources as Biotic Habitat Areas, while Policy OSRC-7b calls for rezoning designated areas and defines principles that land use and development must meet.

Response to Comment #256-02:
The comment pertains to policy issues of Draft GP 2020 and not to the adequacy of the DEIR. Cumulative habitat loss is acknowledged in the DEIR, but is not measurable until the Draft GP 2020 program to conduct a comprehensive habitat mapping of the County is completed (see response to comment #256-01). In addition, the detailed procedures and protocols under which biological studies are conducted are not necessary or appropriate in a broad policy document such as a General Plan. See Master Response C (Program EIR/Level of Detail).

Response to Comment #256-03:
See response to comment #256-02.

Response to Comment #256-04:
Comment noted. See response to comment #256-01.

Response to Comment #256-05:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #256-06:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #256-07:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #256-08:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #256-09:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #256-10:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #256-11:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. Placer County's Tree Preservation Ordinance appears to incorporate into one County Code Chapter protective provisions similar to Sonoma County's Valley Oak Habitat, Native Tree Protection and Heritage Tree Ordinances and the Riparian Corridor policies in Draft GP 2020.

Response to Comment #256-12:
In addition to Policy OSRC-7o (now OSRC-7n), the Draft GP 2020 includes Policies OSRC-7f supporting acquisition of easements, OSRC-7l and OSRC-7m to identify and designate oak habitats, OSRC-7p supporting programs for habitat restoration and enhancement, and LU-10c supporting programs for preservation and enhancement of biotic resources. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #256-13:
Comment noted. Draft GP 2020 includes Policy OSRC-7l to identify and protect oak woodlands. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #256-14:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 project does not propose to remove or revise policies in the Specific Plans or Area Plans pertaining to habitat protection unless it is necessary to achieve the required consistency between such plans and GP 2020.

Response to Comment #257-01:
The DEIR considers the totality of all land uses and development that are likely to occur under Draft GP 2020 at a countywide level of detail appropriate for a Program EIR in each of the topical sections of the DEIR. The site specific impacts of each proposed use would be addressed as part of the project-level environmental review. See Master Response C (Program EIR/Level of Detail).

Response to Comment #257-02:
See Response to Comment #257-01.

Response to Comment #257-03:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Right to Farm Ordinance is an existing regulation and not part of Draft GP 2020.

Response to Comment #257-04:
The DEIR addresses the water quality impacts of all land uses and development under Draft GP 2020 in Section 4.5 (Hydrology and Water Resources). The regulation of chemicals utilized in farming practices is the responsibility of the State Department of Pesticide Regulation. The Right to Farm Ordinance is an existing regulation that is not within the scope of the DEIR.

Response to Comment #258-01:
The DEIR acknowledges the impact of residential development in agricultural areas. The analysis under Impact #4.1-2 contains discussion relating to residential impacts to agricultural land and farming operations.

Response to Comment #258-02:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Policy WR-1i has been revised and now reads: “Develop and implement review procedures for erosion and sediment control for orchards similar to the requirements established for vineyards.”

Response to Comment #258-03:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #258-04:
Comment noted. The importance and vulnerability of old-growth forests and riparian woodland and scrub is acknowledged in the Section 4.6 (Biological Resources) of the DEIR and in the Biological and Wetland Resources Background Report prepared for the Draft GP 2020. This report, as well as comments from the Regional Water Quality Control Boards, the California Department of Fish and Game and other scientific literature underscore the importance of riparian corridors fro multiple purposes and values. As discussed on page #4.6-34 of the DEIR, the few remaining stands of old-growth redwood and Douglas-fir forest are not currently protected. As noted in the response to comment #4-03, evidence suggests that the State and federally-listed marbled murrelet may nest in old-growth cover in the South Fork Gualala River watershed, and stands of old growth redwood and Douglas-fir forest are recognized as sensitive natural community types by the California Natural Diversity Data Base of the California Department of Fish and Game.

Response to Comment #258-05:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR

Response to Comment #258-06:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR

Response to Comment #258-07:
Comment noted. CEQA does not require analysis of economic impacts. However, the feasibility of policy mitigation measures has been a consideration in the review of Draft GP 2020. Ultimately, the Board of Supervisors will make findings regarding whether and why a particular mitigation measure or alternative is infeasible.

Response to Comment #258-08:
Each of the policies cited in the comment relate to prohibitions on fencing which could obstruct movement by wildlife along streams or in designated Habitat Connectivity Corridors. Obstruction of wildlife movement opportunities, particularly along stream corridors and other essential habitat linkages, can be a factor in habitat fragmentation. The policies have been modified to encourage wildlife friendly fencing, primarily due to the difficulty of utilizing fence regulations to establish effective wildlife corridors when there are so many other existing obstacles in most areas of the County and with the difficulty in enforcement of such requirements.

Response to Comment #258-09:
Conversion of undeveloped habitat to urban uses, roadways, and other infrastructure improvements could result in the elimination or displacement of existing wildlife populations. The installation of vineyards, row crops, and other actively managed agricultural uses, timber harvesting, mining, and other activities could also result in the elimination of essential habitat for native wildlife. Even if natural areas are retained as open space, new development and intensively managed land practices could result in fragmentation of the existing habitat and leave local populations vulnerable to extirpation (local extinction).

Draft GP 2020 Open Space and Resource Conservation Element policies related to wildlife movement would serve to reduce the impacts of land uses and development on wildlife habitat and movement over time, but the potential for a cumulative degradation and loss or fragmentation would remain significant.

Response to Comment 258-10:
The comment is correct that this paragraph is somewhat misleading. The following language replaces the paragraph on timber soils on page #4.7-14:

> "Timber Soils
>
> **Though there are many types of forest and tree types, not all have commercial value as lumber, paper or other forest products. "Timber" is a term used to apply to just those timber species which have commercial value. In Sonoma County, these are predominantly conifer species including Redwood and Douglas Fir. Timber soil is soil suitable for growing timber and is just one of the critical factors along with climate, rainfall, topographic orientation, that determine how productive the timberland is. In addition to growth rates, the timber soil can affect seedling mortality, plant competition, windthrow hazard and equipment limitations. The Sonoma County Soils Report ranks timber growing capability of soils by classifying them into nine "woodland groups" which are then further ranked by assigning a "Site Index" that considers the height and size that specific trees of the same age will grow to in the different settings. The California Department of Forestry and Fire Protection uses a slightly different but similar "Site Class" ranking system.**
>
> **Some timber soils may have already been converted to other types of land uses. Though these soils would be "capable" of growing timber, the California Department of Forestry and Fire Protection generally does not consider already converted lands to be "available" for the growing of commercial timber species. For that reason, the actual acreage of timberland may be less than the actual acreage of timberland soils. The Sonoma County**

Soils Report indicates that in 1952 there were about 292,000 acres of timberland growing commercial timber species. However, the margin of error for such estimate is probably large given the technology and methods of the time. A more recent estimate of 230,000 acres of timberland was developed during the preparation of the 2020 General Plan Update using a Geographic Information System (GIS) and year 2000 resource data from State Forest and Range Assessment Program (FRAP). Since many of these acres tend to be in areas of steeper slopes and higher rainfall, careful management practices are required to preserve the timber soil resources and minimize erosion, landslides, stream sedimentation. "

~~More than half of Sonoma County, or about 553,000 acres, are in woodland, with commercial timberlands totaling approximately 292,000 acres.[31] The Sonoma County Soils Report states that in 1952 about 64 percent of the woodland acreage was commercial. However, over the past 50 years the percentage of commercial woodland has steadily declined. This trend is expected to continue. Present zoning shows there are 93,875 acres zoned as timberland in Sonoma County.[32] This comprises about 17 percent of the county's total woodland area. Timber soils are assigned to woodland suitability groups that range in depth from 20 to 60 inches. These soils are subject to high erosion hazards have rapid water runoff, and are easily destroyed unless careful logging practices are enforced. Clear cutting tends to destroy slope stability and increase the potential for landslides, stream bank erosion, and sedimentation of streambeds.~~

Response to Comment #258-11:
As revised by response to comment #258-10, the DEIR on Page #4.7-14 no longer makes any reference to, or comments upon, harvesting methods.

Response to Comment #258-12:
See response to comment #271-16.

Response to Comment #258-13:
Draft GP 2020 Policy OSRC-12e has been modified to reflect the policy language adopted by the Board of Supervisors on March 14, 2006 via Resolution #06-0201. That policy language is as follows:

> "Revise the Districts of the Zoning Code which implement the Resources and Rural Development Land Use Category to reduce the potential for conversion of timberland to non-timber uses."

Accordingly, the discussion of Policy OSRC-12e on page #4.8-29 of the DEIR has been modified as shown in response to comment #271-16.

Response to Comment #258-14:
The comment is correct that numerous species of wildlife utilize rangelands as foraging habitat.

Response to Comment #258-15:
The two statements are not in conflict. As the paragraph notes, a likely explanation for the apparent loss of farmland under the State mapping program is the change in categorization of existing farmland by the State.

Response to Comment #258-16:
See response to comment #219-19.

Response to Comment #258-17:
See response to comment #219-19.

Response to Comment #258-18:
Comment noted.

Response to Comment #258-19:
The comment is not specific about the policies that might have long term negative environmental impacts. However, the impacts of proposed policies on the agricultural industry have been considered in the formulation of Draft GP 2020 by the CAC and Planning Commission. In particular, Draft GP 2020 and its DEIR point out the need to avoid over-regulation of agriculture in order to keep it economically viable.

Response to Comment #258-20:
Comment noted. It is the duty of the DEIR to analyze the adverse impacts of agricultural and other land uses and development.

Response to Comment #259-01:
As noted in Section 2.1 (Proposed Project), the DEIR addresses all land uses and development under Draft GP 2020, including future gravel extraction consistent with the Aggregate Resources Management (ARM) Plan and Section 6 of the Draft GP 2020 Open Space and Resource Conservation Element. Therefore, the impacts of mining operations that would be allowed under Draft GP 2020 are considered at a General Plan level of detail in each of the topical sections of the DEIR, including Section 5.0 (Alternatives) and Section 6.2 (Cumulative Impacts). For example, the water quality impacts of mining operations are analyzed under Impact #4.5-3. The detailed impacts of mining projects have been and will continue to be addressed as part of the environmental review of each application. Cumulative impacts of mining operations are also addressed in greater detail in the ARM Plan EIR, which is incorporated herein by reference. See Master Response C (Program EIR/Level of Detail).

Response to Comment #259-02:
As noted in response to comment #259-01, the cumulative impacts of gravel mining are addressed more specifically in the ARM Plan EIR. In fact, mitigation measures are required of individual instream mining projects that limit the extraction to the amount of gravel that is deposited each year. Since the gravel bed levels are monitored and tracked against the baseline elevations for each mining permit in the Sonoma County reach of the river under the ARM Plan, any drop in the channel, regardless of the cause of the drop, including mining upstream, would be identified. To date, no such drop in below baseline elevation has been detected. See also response to comment #252-26.

Response to Comment #259-03:
Since the project under consideration is a General Plan, the level of analysis is appropriate for a Program EIR addressing impacts at a countywide scale. The specific impacts of each proposed operation would be addressed as part of the environmental review for that project. The General Plan relies upon the ARM Plan to establish policies, procedures, and standards to govern mining operations (Objective OSRC-13.1). Mitigation measures identified in the ARM Plan Program EIR are incorporated into the plan.

Response to Comment #259-04:
Contrary to the comment, there is no application before the County at this time to exceed the 100 acre limit established by the ARM Plan. Syar's application is to extend the time period within which the permitted extraction could occur. See also response to comment #259-03.

Response to Comment #259-05:
Contrary to the comment, monitoring data collected since the implementation of the ARM Plan indicates that mining is not causing a sediment deficit or streambed downcutting. In fact, the level of gravel recharge has been significantly greater than the level of extraction and the Russian River stream bed is aggrading. For these data, see "Annual Monitoring Program Results – Russian River, Sonoma County, California" for the applicable year. Since the ARM Plan policy is to continue to use and enforce these ARM plan standards, no sediment deficit or streambed downcutting issues are anticipated during the 20 year period of this General Plan. The Draft GP 2020 relies upon the ARM Plan as the policy document for addressing the impacts of mining operations as provided in Objective OSRC-13.1. The DEIR addresses the impacts of all land uses and development, including mining, in each of the topical sections of the DEIR at a level of detail appropriate for a countywide general plan and program EIR. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #260-01:
The comment sets forth the requirements for government-to-government consultation between the County of Sonoma as the lead agency and Indian tribes whose tribal interests may be affected by the proposed project, including the Lytton Band of Pomo Indians. The County has held meetings with the tribe and will continue to meet regarding appropriate protection of Native American sacred places and cultural resources.

Response to Comment #260-02:
The comment states the Lytton Band's intention to request specific general plan procedures and policies concerning the protection, preservation, and mitigation of sacred places and cultural resources. Comment #260-03 describes specific policy mitigation measures of interest to the tribe. See response to comment #260-03.

Response to Comment #260-03:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. Section 4.10 (Cultural Resources) of the DEIR addresses the impacts of Draft GP 2020 on cultural resources. Policies OSRC-19-l, OSRC-19m, and OSRC-19n have been added to address protection of Native American cultural resources.

Response to Comment #261-01:
See Master Response A (DEIR Review Period).

Response to Comment #262-01:
See Master Response G (Recirculation).

Response to Comment #262-02:
See response to comment #237-92 and #245-07

Response to Comment #262-03:
The paragraph entitled "City of Sebastopol" on page #4.9-9 is revised as follows:

> The City provides water service to limited areas outside of the City Limits. The source of water is wells ~~to the east of the city~~ **in the eastern portion of the City**." The remaining language that is requested by the comment is not relevant to the context of the subsection on Page #4-9.9, which simply lists the locations of various water supplies.

Response to Comment #262-04:
The most current Urban Water Management Plan (UWMP) available at the time the DEIR was prepared is cited in the DEIR as the source of background information for Exhibits #4.9-1 and #4.9-2 and other data. Although the 2005 UWMP had not yet been completed at that time, the UWMP has very little to do with the water demand in the unincorporated area. Instead, the DEIR's analysis of future water demand is based upon PRMD studies and reports of demand in unincorporated communities that was provided to the Citizen's Advisory Committee as part of its deliberations on water supply and demand. For updated information from the 2005 UWMP, see Master Response P (Urban Water Management Plans). See also Master Response S (Water Supply).

Response to Comment #262-05:
The Exhibit accurately cites information from the SCWA's 2000 UWMP and is not intended to portray the proposed Water Project or any draft agreement that might be related to it. See Master Response P (Urban Water Management Plans),

Response to Comment #262-06:
Exhibit #4.9-1 illustrates the Water Agency's current and projected water supplies for multiple dry years, based on the Agency's 2000 Urban Water Management Plan; the exhibit has been updated to reflect information in the Agency's 2005 Urban Water Management Plan released in December 2006. See

Master Response P (Urban Water Management Plans).

Response to Comment #262-07:
The paragraph on page #4.5-19 in **Section 4.5** (Hydrology and Water Resources**)** is revised as follows:

> "Much of Sonoma County is underlain by hard bedrock with low porosity. In these areas, groundwater is often only contained in large fractures in the rock. The capability to furnish water to wells is quite variable in these areas, depending on the degree and extent of rock fracturing, and the connectivity of fractures with each other and to recharge areas. **Faults and fractures can serve as serve as either aquatards, or aquacludes, or as channels for subsurface water movement. In some parts of Sonoma County, local artesian conditions occur."**

Response to Comment #262-08:
Based on the comment, the paragraph on page #4.5-20 in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "The most recent ~~comprehensive~~ scientific assessment of groundwater resources in Sonoma County was performed between 1975 and 1982 by the California Department of Water Resources (DWR) in cooperation with the SCWA. This assessment was conducted by performing a series of studies documented in DWR Bulletin 118-4. Although DWR was directed to update Bulletin 118 (including 118-4 for Sonoma County) by legislative authorization in the State's Fiscal Year 1999 / 2000 Budget, this update was limited to a brief summary compilation of existing information due to State funding constraints. Given the changes in land use and population that have occurred over the past 30 years, information regarding groundwater resources in Sonoma County is outdated and may not represent current conditions."

Response to Comment #262-09:
See Master Response R (Groundwater Management).

Response to Comment #262-10:
The statement is intended to be a broad, general characterization of the history of groundwater management by local government that involves the regulation or management of usage or withdrawal of groundwater. As qualified, it remains accurate as stated.

Response to Comment #262-11:
The following sentence has been added to the bottom of Page #4-5-20:

"In addition, the County's records of well permits and related water levels are incomplete."

Response to Comment #262-12:
Add the following text to Section 4.5 (Hydrology and Water Resources) of the DEIR on Page #4.5-20:

> "Other municipalities and public water suppliers own and operate wells that are monitored for their own purposes."

Response to Comment #262-13:
The DEIR acknowledges in Section 4.5 (Hydrology and Water Resources) that there are areas of the county where groundwater levels are or have been dropping. This level of detail is sufficient for a Program EIR addressing the impacts of a countywide General Plan. Inclusion of monitoring data from every well for every public water supplier, municipality, or other private or public entity would be overly time consuming, impractical, and unnecessary to understanding the broader impacts of General Plan policy in Draft GP 2020. See also Master Response C (Program EIR/Level of Detail) and Master Response R (Groundwater Management).

Response to Comment #262-14:

These areas are identified on Page #4-5.28 with the appropriate attribution. See also Master Response R (Groundwater Management).

Response to Comment #262-15:
Comment noted. See response to comment #262-13.

Response to Comment #262-16:
Department of Water Resources mapping of the recharge areas in the unincorporated County shows that virtually the entire Laguna de Santa Rosa basin is a "Class 1; Major Groundwater Basin". It also shows a large portion of the Laguna as a recharge area, although the recharge areas do not include the entire plain. As a result, the DEIR is correct in its statement that "the alluvial plain of the Laguna de Santa Rosa to the west is also a Class 1 Area and a major groundwater recharge area".

Response to Comment #262-17:
See response to comment #262-13. The conclusion on Page #4.5-25 regarding the equilibrium status of water levels in wells in the Canon Manor area is supported by the Canon Manor West Assessment District EIR and its accompanying groundwater analyses which was certified by the Board of Supervisors and was not challenged or overturned in court. See also Master Response R (Groundwater Management).

Response to Comment #262-18:
See Master Response R (Groundwater Management). The DEIR takes into account the results of the Kleinfelder Study in its analysis and conclusions regarding groundwater level decline under Impact #4.5-5. However, the following addition to page #4.5-50 would further clarify the results of this study. In the last paragraph of page #4.5-50, the following new second sentence is added:

> "…of the County. **In addition, the recently completed study by Kleinfelder Inc. in 2001 found groundwater declines in three of the County's water scarce areas**. In the past…"

Response to Comment #262-19:
The source of the estimate of 40,000 wells is the PRMD staff responsible for well permits. There are no official records of all of these wells since many were constructed prior to the advent of permit requirements. In addition, County records dating back several decades are not often complete or available. As a result, this figure is an estimate based upon the knowledge and experience of the staff, and includes wells that are located within current City limits as well as in the unincorporated area.

Response to Comment #262-20:
The comment is partly correct. According to staff at the City of Sebastopol, no formal ordinance has been adopted to implement the full Wellhead Protection Program. However, as the comment notes, implementation has begun. As a result, the last sentence of the third paragraph on page #4.5-36 is revised as follows:

> "In Sonoma County, the City of Sebastopol has developed **and initiated implementation of** a Wellhead Protection Program ~~which was implemented~~ in coordination with and overseen by DHS."

Response to Comment #262-21:
Comment noted. See Master Response R (Groundwater Management).

Response to Comment #262-22:
The comment correctly points out that groundwater will continue to be an important source of water in the future, both to meet peak demands, and also during times of drier than normal rainfall, when reservoir storage and surface diversion is diminished. Good groundwater management will take on increased importance, and having accurate information on groundwater availability and use will also critical. That is why the SCWA has contracted with the USGS to undertake studies of groundwater in key basins of the

county, with support from the County, other public water suppliers, and the cities.

The DEIR, in Section 4.5, identifies the cooperative studies of the County's major groundwater basins, which are in progress, or are recently completed, and goes on to describe under Impact #4.5-5 that there are areas where groundwater level declines are evident. At this writing, however, there has been no conclusive study that has shown an existing overdraft condition in the South Santa Rosa Plain. Section 4.9 (Public Services) of the DEIR makes it clear that the majority of water demands in the unincorporated area will be relying upon groundwater supplies. See also Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #262-23:
Comment noted. The DEIR uses the significance criteria contained in the State CEQA Guidelines.

Response to Comment #262-24:
See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #262-25:
Stormwater management, including requirements for sediment control is regulated under the NPDES permit program of the EPA. See also response to comment #262-27.

Response to Comment #262-26:
The DEIR provides an explanation for this conclusion in the text on page #4.5-31, essentially acknowledging that flooding problems continue in spite of the progress made under the existing regulations and policies of the County. The Draft GP 2020 Public Safety and Land Use Elements include goals, objectives and policies that will continue to reduce flooding impacts and monitor the effectiveness of measures taken to implement the policies. The recently adopted Sonoma County Hazard Mitigation Plan also includes policies related to monitoring of flood hazards and that Plan has been incorporated into the Public Safety Element.

Response to Comment #262-27:
The comment is incorrect in stating that Phase II stormwater management is not a part of the NPDES program promulgated by the EPA and administered in California by the State Water Resources Control Board. The EPA's NPDES program is not limited to wastewater issues. See the following web sites:
http://www.swrcb.ca.gov/stormwtr/municipal.html,
http://www.epa.gov/region09/water/npdes/index.html
SUSMP stands for "Standard Urban Stormwater Mitigation Plan", not Stormwater Management.

Response to Comment #262-28:
Comment noted. The two groups mentioned in the DEIR are cited as examples of local environmental groups that undertake this type of activity. It would be difficult if not impossible to name every group involved in water quality monitoring and inventories.

Response to Comment #262-29:
See Master Response N (Climate Change).

Response to Comment #262-30:
The DEIR in Section 5.0 (Alternatives) identifies and examines three alternatives to the Draft GP 2020. The alternatives consist of a range of policy options at a countywide level of detail appropriate for a General Plan and Program EIR. than the project. Section 4-12 (Energy) of the DEIR addresses the project impacts on energy demand and the mitigation measures contained in the Draft GP 2020. It also recognizes that, regardless of the County's policies, energy demand from such sources as oil will continue for the foreseeable future. In addition, Draft GP 2020 and the DEIR recognize the importance of energy resources and include proposed policies to reduce overall energy demand and to increase energy production from renewable sources.

Response to Comment #262-31:
The comment recommends a series of policy revisions that claim to reduce the impacts of Draft GP 2020 on water quality and water supplies. However, since the project is a General Plan policy document, broad policy language reflects the appropriate level of detail. See also Master Response C (Program EIR/Level of Detail) and Master Response D (Effectiveness of Mitigation Measures). Responses to specific recommendations are as follows:

-The proposed revision to Objective WR-1.1 does not appear to reduce the impacts of Draft GP2020 land uses and development.

-Objective WR-1.2 has been deleted as it is the responsibility of the applicable RWQCB and wastewater system operators to regulate the quality of treated water. The proposed revision to Objective WR-1.2 includes a definition in the objective and adds no additional mitigation. In addition, the meaning of a requirement for an opportunity is unclear at best.

-The proposed revision of Policy WR-1a appears to require that regulations be written to develop education and assistance programs. The regulatory implementation of RWQCB requirements is contained in Policies WR-1c, WR-1e, and WR-1f.

-Proposed Policy WR-1c already reflects some of the requested changes. However, setting of specific dates for establishing programs is not appropriate or feasible in a general policy document such as Draft GP 2020. Implementation priorities for programs are addressed in the County's annual budget process and work planning functions. See Master Response D (Effectiveness of Mitigation Measures). In addition, since the stormwater pollution levels of 2000 are unknown, it is not feasible to set a target of a specific percentage for reduction. Groundwater recharge protection is provided by Policy WR-2e and WR-4b.

-Proposed Policy WR-1d has been revised to reflect some of the requested changes. The policy is sufficient as revised to call for County implementation of RWQCB TMDL requirements.

-Proposed Policy WR-1f does not appear to provide further mitigation of the water quality impacts of Draft GP 2020.

Response to Comment #262-32:
-The proposed revision to the implementation statement does not change its meaning. The proposed change to Policies WR-1g and WR-1h are impractical and infeasible, as the current sediment deposition and discharge is unknown. Once the RWQCB TMDL requirements are established, the targets for sediment deposition will be available for implementation by the County and other applicable agencies.

-The proposed revision to Policy OSRC-11a does not appear to change the meaning or effectiveness of this policy. This policy is currently implemented through the County project review procedures.

-The proposed revision to Policy OSRC-11c to reflect the proper name of the Agency has been made in Draft GP 2020. Adding "strongly" does not appear to reduce the water quality impacts of Draft GP 2020.

-The intent of the suggested revision to Policy OSRC-11e is unclear and is likely to be impossible to implement. The policy already sets a standard that allows judgment based upon the circumstances of each project. Setting of arbitrary quantitative sediment or vegetation levels over an indefinite period of time, particularly when factors other than the project may be involved, does not appear to be feasible.

-The proposed revision to Policy OSRC-11f does not appear to reduce the water quality impacts of Draft GP 2020. A report does not have regulatory status.

See Master Response C (Program EIR/Level of Detail) regarding the purpose of general plan policies.

Response to Comment #262-33:

See response to comment #6-08.

Response to Comment #262-34:
-It is unclear how the addition of language to "more strongly encourage compliance" would further reduce the water quality impacts of Draft GP 2020.

-With respect to discretionary approval of grading permits, see response to comment #4-14.

-With respect to the effectiveness of the VESCO, the Agricultural Commissioner's Office inspects each Level 2 and Level 3 permit for the first year and then periodically rechecks sites on a random basis during periods of heavy rain and runoff. Office staff feels that the ordinance is effective for these operations. In addition, they note that the number of complaints filed with the Water Quality Control Boards of erosion events has dropped significantly (personal communication, Gail Davis; Agricultural Commissioner's Office).

-Policy OSRC-12c would not be applicable to timber harvest plans that do not involve Class III streams.

-The proposed revision to Policy OSRC-12d would not further reduce the water quality impacts of Draft GP 2020, since timber operations are under the jurisdiction of the State.

Response to Comment #262-35:
As noted in response to comment #4-14, pending County grading regulations and Draft GP 2020 policies will establish more rigorous standards for grading roads on slopes. The proposed goal of protecting rivers from the erosion impacts of all human uses is included in Draft GP 2020, particularly in the Draft Water Resources, Public Safety, and Open Space and Resource Conservation Elements, for the benefit of all County residents and businesses.

Response to Comment #262-36:
This comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. The comment is unclear how an update of the ARM Plan would impact water quality.

Response to Comment #262-37:
The comment is correct that many older private wastewater disposal systems are not treating wastes to modern standards. These systems may include older community systems as well as individual septic systems. However, future system operations and upgrades would be subject to compliance with standards of the RWQCBs and other applicable agencies. As a result, the impacts of future systems and development using those systems are not anticipated to result in significant water quality impacts.

With respect to the NPDES program, see response to comment #218-64, #262-25, and #262-27.

Response to Comment #262-38:
Impact #4.4 on DEIR pages #4.4-49 and #4.4-50 addresses water quality impacts from land uses and development projected to occur under Draft GP 2020. Wastewater projects proposed by the City of Santa Rosa and the Sonoma County Water Agency are not within the jurisdiction or authority of the County of Sonoma. The impacts of any such projects would be addressed by the applicable lead agency as part of its project review and environmental review process. The Draft GP 2020 EIR addresses the impacts of all future wastewater disposal at a broader level of detail appropriate for a Program EIR on a General Plan for the entire unincorporated County. See also response to comment #250-01, #263-13, and #286-29.

Impact #4.5-4 notes that wastewater disposal operations are subject to the regulations of the Regional Water Quality Control Boards. These regulations are described in the text of the DEIR preceding this impact analysis. These existing regulations, coupled with the Draft GP 2020 policies cited in this section, would reduce those water quality impacts to a less than significant level. In order to better describe this issue, the following text will be added to the discussion on Page #4.5-49:

In addition, the following revision to the fourth paragraph of Page #4.5-50 has been added:

> ”Adoption and implementation of the relevant policies of the Draft GP 2020 would assure that impacts associated with failing sewer and septic systems would be reduced to a less than significant level. **These regulations and policies will also help to address the water quality impacts of wastewater disposal projects of the cities and special districts in Sonoma County that are primarily responsible for such operations.”**

Response to Comment #262-39:
Contrary to the comment, Section 4.5 (Hydrology and Water Resources) under ”State and Federal Regulations”, discusses RWQCB regulations regarding the water quality of discharges from wastewater plants. A detailed listing of all such standards is not required in either the DEIR or the Draft GP 2020. See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #262-40:
Since the impact of Draft GP 2020 on water quality related to wastewater disposal is a less than significant impact, the proposed revised policies in this comment are not required in order to reduce impacts. Further, the proposed revisions do not appear to reduce the water quality impacts of Draft GP 2020. The comment has been submitted to the decision making bodies for consideration.

-The proposed policy revision to reduce contamination through source controls and user education is addressed in Policies WR-1a, Wr-1j, and WR-1r.

-The proposed policy to establish benchmarks for depletion of water resources is addressed in Policies WR-1c, WR-1d, and WR-1e of the Draft GP 2020 Water Resources Element.

-The proposed policy that would set standards for package treatment plans is addressed in Policy PF-1l of the Draft GP 2020 Public Facilities and Services Element. In addition, these plants are subject to standards of the applicable RWQCB.

Response to Comment #262-41:
This comment pertains to a policy issue in the Draft GP 2020 and not to the adequacy of the DEIR. For further discussion of groundwater management, see Master Response R (Groundwater Management).

Response to Comment #262-42:
The Sonoma County Water Agency is not responsible for requiring its contractors to carry out growth plans, either with or without alternative water supplies. Instead it is the contracting land use authorities, whether city or county, that adopt and follow growth plans and that determine whether or not proposed land uses have, or will have, the necessary water available. As noted under Impact #4.5-5 in the DEIR, for uses and development that would occur under Draft GP 2020, this impact is significant as a result of the uncertainty regarding the sustainable yields of groundwater. In addition, the decisions of the Cities, the Agency, and other public water suppliers regarding future growth are not under the County’s control.

The proposed revision to Objective WR-2.3 does not reduce potential impacts on groundwater levels beyond what is provided in Draft GP 2020. Draft GP 2020 provides for monitoring of groundwater basins and provides for AB3030 groundwater management plans where such plans are justified based upon the results of monitoring and basin studies. Requiring such plans to resolve every future groundwater problem may actually increase the impact because it would require a groundwater management plan when other simpler management tools may be just as or more effective.

The proposed revision to Objective WR-2.4 does not substantially change the meaning or effectiveness of the objective in reducing impacts.

The proposed revision to Objective WR-2.5 does not substantially change the meaning or effectiveness of the objective in reducing impacts of Draft GP 2020.

The proposed revision to Objective WR-2.6 is similar in effect to Draft GP 2020 Objective WR-2.1 which calls for management of groundwater resources on a sustainable basis and Objective WR-3.2 which calls for cooperation with public water suppliers to conduct long term planning to achieve sustainable water supplies. In addition, it is not feasible to remediate existing land subsidence, as once it happens, restoration of groundwater levels does not readily elevate the subsided areas.

Response to Comment #262-43:
This CEQA process already exists for discretionary permits, subjecting projects in water scarce areas to a review of potential cumulative impacts on the surrounding groundwater resources. There does not yet exist a justification, either scientific or legal, for imposition of a CEQA review process for all wells associated with uses that are either permitted outright or subject only to a ministerial permit. Should groundwater conditions be determined in the future to be such that regulation is appropriate or necessary, the Draft GP 2020 Water Resources Element provides the guiding policy framework for such an action.

Response to Comment #262-44:
This comment pertains to a policy issue in the Draft GP 2020 and not to the adequacy of the DEIR.

Response to Comment #262-45:
The proposed policy revision assumes that groundwater overdraft conditions exist throughout Sonoma County. As described in Section 4.5-5, the DEIR concludes that uses and development under Draft GP 2020 could cause a significant impact on groundwater supplies precisely because there is not enough current information available regarding groundwater availability and the sustainable yield of important aquifers. Since overdraft conditions have not been shown to exist in these areas, it is premature to require that an AB3030 plan be prepared. Section 3.2 of the Draft GP 2020 Water Resources Element establishes an appropriate framework for developing the necessary information and addressing identified problems, including through the creation of agencies with the necessary authority to manage groundwater. See also Master Response R (Groundwater Management).

Response to Comment #262-46:
The proposed revision to Policy WR-2f may not be feasible, particularly for infill development in urban areas and for higher density housing projects on small lots. As a result, the qualifier ”to the maximum extent practicable” provides a minimum level of flexibility for decision-makers to recognize the unique circumstances of some projects. Draft GP 2020 does not include mandatory runoff and recharge controls in rural areas as it has not been shown to be necessary or effective in reducing impacts, given the preponderance of large lot sizes and minimal potential for land uses that would result in significant loss of recharge.

The proposed revision to Policy PS-2l is not necessary to accomplish the purpose of protecting and enhancing groundwater recharge as that purpose is addressed in Policies WR-2b and WR-2e of the Draft GP 2020 Water Resources Element.

Response to Comment #262-47:
The suggested revisions to policies WR-2g, 2h, and 2i do not substantially change the meaning or effectiveness in reducing impacts compared to the Draft GP 2020 policies.

Response to Comment #262-48:
The proposed new Policy WR-2p is not necessary because the Draft Water Resources Element supports a full range of groundwater management actions as needed to address specific problem areas, including the creation of agencies with the necessary authority to manage groundwater.

The scientific basis for imposing restrictions in proposed new Policy WR-2q has not been established, either in the identification of any basins that are in an overdraft condition or in a detailed analysis of the impacts of continued groundwater usage by existing users. In the absence of an adjudication of the groundwater basin, the proposed policy may be an unlawful infringement of an overlying owner’s right to extract groundwater.

Regarding the third proposed new policy for Section 3 of the Water Resources Element, see response to comment #262-45.

Response to Comment #262-49:
The suggested policy revision to Policy WR-1s, now WR-1t, presumes that all saltwater intrusion, regardless of the degree, cause, or extent, is related to groundwater extraction and that a groundwater management plan is the only available solution. In addition, Draft GP 2020 Objective WR-1.5 and Policy WR-1u call for avoiding increases in saltwater intrusion into groundwater in future environmental analyses and as part of discretionary project analyses. These policies provide a broader and more effective mechanism to address such a problem. They first rely upon an analysis and determination that a problem related to groundwater conditions exists and then selection of the appropriate management action necessary to address it. As such, Draft GP 2020 policies provide more effective reduction of potential impacts.

Response to Comment #262-50:
Draft GP 2020 proposes to increase data collection and to develop a well monitoring program as necessary to improve the County's knowledge and understanding of groundwater conditions before imposing unsubstantiated restrictions or limitations on well permits. The Draft GP 2020 policies set forth a framework to address groundwater problems where they are identified. Premature commitment to a countywide groundwater management plan for problems occurring in isolated areas could in some cases delay corrective action unnecessarily. The proposed revisions to Policy WR-2c in the comment are either duplicative of policies already in Draft GP 2020 or premature without scientific and legal justification.

-As noted in response to comment #235-24, the proposed requirement for CEQA review of well permits has not been justified by sufficient data regarding groundwater conditions in the County. Instead, the Draft GP 2020 Water Resources Element sets forth policy for a monitoring program and subsequent groundwater management actions appropriate to resolve identified problems.

-The proposed revision to Policy WR-2c (3), now WR-2e, is unnecessary as there has not been sufficient justification for such stringent controls in these Class 1 and 2 areas of relatively abundant water availability.

-Policy WR-2c(4) has been deleted in favor of a broader policy approach to monitoring as provided in Policy WR-2d, which requires monitoring where it is justified based upon groundwater conditions.

-With respect to Policy WR-2c (7), now WR-2c (3), the criteria would be established in the implementing codes following adoption of GP 2020.

-Proposed new Policy WR-2c (8) is duplicative of Policy WR-2i that provides for appropriate groundwater management actions for identified problem areas.

-Regarding the assignment of responsibility on DEIR page #4.5-57 for carrying out mitigation measures, this statement of responsibility meets CEQA requirements as written.

See also Master Response R (Groundwater Management).

Response to Comment #262-51:
See response to comment #262-32. The proposed revision to Policy WR-1b does not appear to provide further reduction of the water quality impacts of Draft GP 2020. BMPs utilized pursuant to this work would be based upon the applicable requirements in place at the time.

-The proposed revision to Policy WR-1b addresses an administrative detail that is unnecessary in a General Plan and provides no additional impact reduction.

Response to Comment #262-52:
As noted on pages #4.5-60 through #4.5-63, the DEIR relies not only upon the Draft GP 2020 policies,

but also existing regulations to conclude that this impact would be less than significant.

With respect to Policy PS-2a, the use of the information is relevant to implementation of the policies in the remainder of Section 3.3 related to reducing flood hazards.

With respect to Policy PS-2f, the FEMA maps and data are the basis for identifying and mitigating flood hazards and impacts in the review of development applications.

With respect to Policy PS-2l, see response to comment #6-33.

With respect to Policy PS-2p, now PS-2q, Draft GP 2020 already limits development in flood plains where possible and favors flood management over flood control. However, less use of available mitigation measures (flood control structures), which the revision suggests, would not result in impact reduction. As described under impact #4.5 on page #4.5-65, the relocation of existing development on the lower Russian River outside of flood zones is likely infeasible.

With respect to Policy PS-2q, now PS-2r, the County has already created and applied flood hazard zoning to all flood hazard areas delineated by FEMA with applicable development standards. See also response to comment #262-59 regarding the suggested revision to Policy PS-2u, now PS-2w.

Response to Comment #262-53:
See response to comment #285-29.

Response to Comment #262-54:
See response to comment #285-26.

Response to Comment #262-55:
See response to comment #285-26.

Response to Comment #262-56:
See response to comment #285-26.

Response to Comment #262-57:
See response to comment #285-27.

Response to Comment #262-58:
See response to comment #285-28.

Response to Comment #262-59:
Policy PS-2w has been revised as recommended by the DEIR's Mitigation Measure #4.5-12. This mitigation measure provides consistency with the conclusions of Section 4.7 (Geology/Soils) that extreme rainfall and seismic events could result in significant damage to land uses and development. The reason for this conclusion is provided in the language of Policy PS-2w. If the inundation maps indicate that dam failure may cause loss of life or property or personal injury, the responsible party is to identify potential problems and rehabilitate or maintain the dam as may be necessary to avoid failure. These measures would, depending on the situation, include upgrades to avoid seismic-related failure, groundshaking, landslides, subsidence and settlement, and landslide-induced tsunamis. Policy PS-2w provides the maximum feasible mitigation that is within the jurisdiction of the County of Sonoma.

Response to Comment #262-60:
See Master Response E (Extent of Significant Impacts) and Master Response B (Jurisdiction). See also response to comment #262-2 through #262-59 regarding Impacts #4.5-1 through #4.5-9. See also response to comment #262-61 through #262-71.

Response to Comment #262-61:
This comment provides recommendations for policy revisions and for new policy that provides no

additional mitigation beyond that provided by Draft GP 2020. The comment has been submitted to the decision making bodies for consideration.

-The proposed revision of Goal WR-3 does not accomplish the intended purpose of the Goal in Draft GP 2020. The goal reflects the need to provide enough quality water supplies for existing and planned growth. It is not necessary for a general goal statement to include detailed definitions.

-The proposed revisions to Objective WR-3.2 and WR-3.4 improperly assign the public water suppliers with the responsibility for planning for growth in the County and are therefore infeasible. Some cities supply water and plan for growth, but the cities are also outside of the jurisdiction of the County of Sonoma.

-The proposed revision to Objective WR-3.3 improperly assigns the public water suppliers with the responsibility for providing water to rural areas not served by public water systems and is therefore infeasible.

-The proposed revision to Objective WR-3.5 adds detail that does not provide further mitigation of the referenced impacts

-The proposed revision of Objective WR-3.6 improperly presumes that reliance upon surface water is always better than groundwater. There may well be conditions in parts of the County where reliance upon groundwater is more sustainable than reliance upon surface water. The Draft GP 2020 Water resources Element has been revised to reflect this reality and recommends in Policy WR-3n that public water suppliers balance their use of surface and groundwater to minimize harm to other water users and the environment.

-The proposed revisions to Policies WR-3a, WR-3b, and WR-3g do not add further mitigation, particularly since these policies continue to depend upon the actions of public water suppliers not under the jurisdiction of the County.

-The proposed revision to Policy WR-3i improperly presumes ahead of time that a justification exists for a moratorium prior to the technical and legal groundwork being established and a proposal being forwarded and considered in a public forum.

-The proposed revision to Policy Wr-3q does not offer further mitigation.

-The proposed deletion of Policy WR-3r does not offer further mitigation beyond the Draft GP 2020 Water Resources Element Objectives to plan water use on a sustainable basis. In addition, the proposed revisions to Policy WR-3r merely add detail to a policy that provides for working with public water suppliers to assist in providing adequate water supplies.

-The proposed new Policy WR-3t is addressed by Draft GP 2020 Policy WR-2i and WR-2j that call for groundwater management plans or other appropriate management actions where the need is demonstrated.

Response to Comment #262-62:
The comment proposes several revisions to Draft GP 2020 goals, objectives, and policies to address Impact #4-9.1 regarding water supplies for urban areas. Generally, the proposed revisions merely add emphasis to Draft GP 2020 without contributing to reduction of these impacts, particularly the changes in Goal WR-4.

-The proposed Objective WR-4.4 is addressed in Policies WR-4b and WR-4f.

-The proposed revisions to Policy WR-4b would add unnecessary detail to the Draft GP 2020 that is more appropriate for the implementing codes. The Draft GP 2020 includes a broader policy that provides equivalent mitigation.

-Proposed revisions to Policies WR-4c and WR-4e add detail, but do not provide additional mitigation to the existing policies.

-The proposed revisions to Policy WR-4k are under the jurisdiction of the wastewater system providers and not the County of Sonoma.

-Proposed Policy WR-4p is not feasible. The County of Sonoma does not have exclusive jurisdiction over surface and groundwater that is not used.

Response to Comment #262-63:
-The recommended changes to the introductory text of Section 3.5 of the GP 2020 Draft Water Resources Element are related to policy issues of the Draft GP 2020 and not to its impacts or the adequacy of the DEIR.

-The comment proposes revisions to the goals, objectives and policies of Draft GP 2020 to address Impact #4-9.1 regarding water supplies for urban areas. Generally, these revisions merely add emphasis to Draft GP 2020 policies that does not contribute to impact reduction.

-The proposed revision to Goal WR-5 merely adds emphasis without changing the goal's effectiveness.

-The proposed revision to Objective WR-5.2 overstates the ability of the County to control water imports and exports. Decisions regarding water imports and surface water exports are not under the jurisdiction of Sonoma County. With respect to exports of groundwater, see response to comment #235-25.

-The purpose of the proposed new Objective WR-5.3 is addressed in other sections of the Draft GP 2020 Water Resources Element, particularly Objectives WR-2.1, Policy WR-2d, Objectives WR-3.2 and WR-3.3, and Policy WR-3b.

-The proposed revision to Policy WR-5a and WR-5c regarding surface water exports are not under the jurisdiction of the County of Sonoma and are therefore not feasible. However, with respect to exports of groundwater, see response to comment #235-25.

Response to Comment #262-64:
The comment does not explain how the previous policy recommendations would reduce the need to expand wastewater and water supply facilities, reduce wastewater treatment demand, or reduce the need for solid waste treatment. No further response is warranted.

Response to Comment #262-65:
The comment suggests the DEIR contains too many significant and unavoidable cumulative impacts, but provides no additional language or mitigation to reduce significant cumulative impacts. The DEIR addresses the impacts of all development and land uses under Draft GP 2020 on energy resources in Section 4.12 (Energy Resources) and on water supply and wastewater in Section 4.9 (Public Services). Cumulative impacts are analyzed in Section 6.2 (Cumulative Impacts). This analysis is sufficient for a countywide General Plan and Program EIR. See also response to comments #262-29 and #262-30, Master Response C (Program EIR/Level of Detail), , and Master Response E (Extent of Significant Impacts).

Response to Comment #262-66:
See Master Response N (Climate Change).

Response to Comment #262-67:
The impacts of Draft GP2020 population growth on water quality are addressed in Section 4.5 (Hydrology and Water Resources) of the DEIR. Alternatives are addressed in Section 5.0 (Alternatives) of the DEIR.

Response to Comment #262-68:

The Draft GP 2020 Public Facilities and Services Element carries forward Policy PF-2t from the existing General Plan, which allows the application of biosolids only to enhance existing agricultural operations, only with approval from the RWQCB, and only under strict requirements to assure protection of soil, water, and agriculture.

Biosolids land applications are also heavily regulated by various state and federal agencies, including the Regional Water Quality Control Boards, the Department of Health Services, and the State and Federal EPAs. Impacts on water quality from agricultural uses under Draft GP 2020, including the use of fertilizers, are addressed in the DEIR under Impact #4.5-3 at a programmatic level appropriate for a General Plan EIR. The project-level impacts would be addressed during the review of specific biosolids land application project proposals. Many of these issues have also been addressed in the Statewide Biosolids Land Application Programmatic EIR available at http://www.swrcb.ca.gov/programs/biosolids/biosolids.html.

Response to Comment #262-69:
The impacts of Draft GP 2020 on water quality are addressed in Section 4.5 (Hydrology and Water Resources) of the DEIR. The comment does not specify the type or source of contaminants and byproducts. No further response is warranted.

Response to Comment #262-70:
The impact of Draft GP 2020 on public services and infrastructure are addressed in Section 4.9 (Public Services) and Section 4.2 (Transportation) of the DEIR. Economic impacts are outside the purview of an EIR under CEQA.

Response to Comment #262-71:
Comment noted. See Master Response E (Extent of Significant Impacts).

Response to Comment #263-01:
Comment noted. See also Master Response E (Extent of Significant Impacts). The comment is not clear about what studies are necessary to define meaningful mitigation measures.

Response to Comment #263-02:
The process for review of the DEIR has been conducted in accordance with CEQA. Since the project being addressed in the DEIR is a General Plan, the mitigation measures are in the form of policies and programs, most requiring additional future action by the responsible entity to carry out following the adoption of GP 2020. Many of these future actions can only be accomplished if staffing and resources are available. Since these resources are not guaranteed, the Draft GP 2020 includes an indicators/monitoring program to provide feedback to the public and decision makers regarding the implementation and the effectiveness of the plan. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #263-03:
See Master Response P (Urban Water Management Plans).

Response to Comment #263-04:
The DEIR relies upon sewer and water system demand and capacity studies for the unincorporated area prepared by PRMD for Draft GP 2020 and referenced in Section 4.9 (Public Services) of the DEIR. Section 4.5 (Hydrology and Water Resources) of the DEIR cites the sources of water quality information utilized by the preparers of the DEIR. See also Master Response S (Water Supply).

Response to Comment #263-05:
See Response to Comments #263-03 and #263-04. Contrary to the comment, the SCWA's UWMP does not provide a comprehensive planning document for water use in the unincorporated County because the Airport area (served through the Town of Windsor, the Valley of the Moon Water District, and a few additional "other customers" identified in Section 4.9 (Public Services) of the DEIR and in Master Response S (Water Supply) are the only Agency customers in the unincorporated area.

Response to Comment #263-06:
The level of detail of the EIR analysis is appropriate for a Program EIR addressing impacts at a countywide scale. It is not possible at that scale to address the potential impacts of specific gravel mining operations on ground water quality and quantity. Draft GP 2020 relies upon the Aggregate Resources Management (ARM) Plan to address the areas of mining extraction and set forth the County's policies, procedures and standards for mining operations. This Plan and its Program EIR incorporate the environmental studies and mitigation measures related to the impacts of mining on the aquifer in the Middle Reach of the Russian River. These impacts are monitored by the County on a regular basis and the results of that monitoring to date have not revealed any significant impacts. This information is available for review at the PRMD offices. See also responses to comments #252-25 through #252-30.

Response to Comment #263-07:
See response to comment #263-06.

Response to Comment #263-08:
Alternatives that were considered to the mining of the river terraces under the ARM Plan included instream, quarry, recycling, and importation. The impact of terrace mining was considered in the ARM Plan and Program EIR and in each mining proposal involving this source. The GP 2020 DEIR considered the impacts of all land uses and development, including mining operations, in each of the topical sections. Section 4.2 (Transportation) of the DEIR analyzes the traffic impacts of these uses, The impacts of individual projects would be addressed as part of the project's review. See also response to comment #263-06.

Response to Comment #263-09:
The Draft GP 2020 provides goals, objectives, and policies that will, over time, provide the necessary data regarding groundwater conditions and actions necessary to manage water supplies on a sustainable yield basis. The groundwater studies utilized by the preparers of the DEIR are cited in Section 4.5 (Hydrology and Water Resources) and Section 4.9 (Public Services). See also response to comment #263-11.

Response to Comment #263-10:
The Draft GP 2020 does not propose and would not approve any specific mining projects, and thus analyzes impacts at a program level. The ARM Plan PEIR and CEQA documents for all subsequent mining projects consider all potential impacts of mining operations, including the potential redirection of flood and groundwater flows in the Middle Reach. The DEIR nevertheless acknowledges the potential impact of flood flow redirection for all land uses under Draft GP 2020, including mining operations, on page #4.5-55 in Section 4.5 (Hydrology and Water Resources) under Impact #4.5-11 in the discussion of bank failure and streambank erosion. The County has reviewed information provided by Dr. Curry in its review of past mining proposals, including the approved Syar Phase VI Use Permit, and will continue to do so in the future. Regular well monitoring is carried out in the area of the terrace pits as provided in the ARM Plan and conditions of approval for each operation. See also response to comment #252-29.

Response to Comment # 263-11
The Draft GP 2020 does not propose and would not approve any specific mining project that would implicate the original MODFLOW modeling. The County has considered the MODFLOW monitoring in the context of specific mining applications, including the approved Syar Phase VI Use Permit, and determined that the results of the original 1997 report remain accurate. The County nevertheless recently commissioned an independent review of the MODFLOW model. See the Syar Phase VI Use Permit and ARM Plan Amendment Subsequent Draft EIR (June 2007), Chapter IV.C and Appendix G, for more information.

Response to Comment #263-12:
Water quality impacts and mitigation measures are presented in Section 4.5 (Hydrology and Water Resources); the impacts of mining are addressed at a programmatic level appropriate for a countywide General Plan under Impact #4.5-3. The impacts of gravel mining are addressed in greater detail in the

Aggregate Resources Management Plan and Program EIR and as part of the review process for applications for individual mining permit applications. In addition, it should be noted that terrace mining is being phased out pursuant to the ARM Plan,

Impact #4.5-12 addresses the potential impacts of the failure of a dam or levee that is intended for flood protection. The impacts of flooding and sedimentation of rivers and streams from land uses and development in the unincorporated area, including mining operations, are addressed under Impacts #4.5-1, #4.5-2, #4.5-3, and #4.5-4.

Response to Comment #263-13:
The Draft GP 2020 does not propose and would not approve the City of Santa Rosa's IRWP Project or an other specific proposal to dispose of treated wastewater. The IRWP and North Sonoma County Agricultural Reuse Project are separate endeavors proposed by separate entities who must, under CEQA, analyze all the direct, indirect, and cumulative effects of treated wastewater disposal. As noted in Section 4.5 (Hydrology and Water Resources), wastewater disposal by public wastewater management systems, private septic systems, and other methods is subject to a variety of federal and state water quality standards, including those imposed by California Code of Regulations, Title 22, Division 4, Chapter 3, and implemented by the Regional Water Quality Control Boards. These regulations and new policies included in Draft GP 2020 would reduce water quality impacts to a less than significant level.

As noted in Section 6.2 (Cumulative Impacts), the DEIR includes future City public service and infrastructure projects such as the Integrated Recycled Water Program (IRWP) in its assessment of impacts of future land uses and development allowed by Draft GP 2020 at a programmatic level of detail appropriate for a General Plan. Impacts to water quality, including from treated wastewater used for agriculture and landscaping, are addressed in Impact #4.5-4 (Wastewater Disposal). See also response to comments #262-38 and #286-29 and Master Response C (Program EIR/Level of Detail).

As to the need for measures to prevent the use of wastewater for frost protection or other uses, Draft GP 2020 Policy WR-4j provides for reuse of wastewater only where appropriate in quality and quantity to the intended use. If wastewater proposed for re-use contains contaminants at levels above the required water quality standards of the applicable RWQCB, the reuse would not be allowed.

Response to Comment #263-14:
The level of detail requested in the comment is outside the scope of a programmatic EIR for a countywide general plan. Wastewater treatment and disposal regulations are developed and imposed by various state and federal agencies, including the Regional Water Quality Control Board, the Department of Health Services, and the EPA. The questions posed by the comment regarding using Best Available Technology treatment standards and monitoring are best resolved by these agencies, and at a project level of design, review, and approval. The DEIR relies upon the current and applicable standards of these agencies in determining the impact of Draft GP 2020 on water quality from wastewater disposal operations. Policy WR-4j requires that treated wastewater be appropriate for beneficial uses in both quality and quantity. Details would be provided in the implementing regulations and codes. See Master Response C (Program EIR/Level of Detail) and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #263-15:
See response to comment #263-14.

Response to Comment #263-16:
Water supply for existing and future growth is addressed in Section 4.9 (Public Services) of the DEIR. Impacts on endangered species are addressed in Section 4.6 (Biological Resources). See also Master Response S (Water Supply).

Response to Comment #263-17:
The "project" identified in the comment has only been discussed as an alternative delivery system for delivery of SCWA water via the main stem of Dry Creek and the Russian River. See also Master Response Q (SCWA Water Project) and Master Response S (Water Supply). The growth inducing

impacts of public projects necessary to serve Draft GP 2020 land uses and development are addressed in Section 6.1 (Growth Inducing Impacts) of the DEIR.

Response to Comment #264-01:
The potential environmental effects that might result from the redirection of County financial resources to defending lawsuits that might be filed to challenge the taking of property rights through "excessive regulations" is too speculative to warrant analysis.

Response to Comment #265-01:
Figures #4.2-3, #4.2-4, and #4.2-5 of Section 4.2 (Transportation)of the DEIR contain road segments (rather than intersections) identified as experiencing significant traffic impacts under Draft GP 2020. Traffic volumes on Highway 12 and Arnold Drive were identified as part of the traffic analysis, but predicted congestion was not significant.

Response to Comment #265-02:
The addition of this policy is necessary to reduce congestion and improve safety at intersections along Arnold Drive. However, the policy includes the limitation that the improvements must meet the road classification provisions in the Draft GP 2020 Circulation and Transit Element. The impacts of the specific improvements would be addressed in greater detail when they are proposed in the future. See Master Response C (Program EIR/Level of Detail) and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #266-01:
The comment states the opinion that without the inclusion of additional, feasible mitigation measures, the DEIR fails to comply with CEQA and the State CEQA Guidelines. The comment's specific concerns regarding the adequacy of the DEIR are stated in subsequent comments and are addressed in responses to those comments.

Response to Comment #266-02:
See Master Response E (Extent of Significant Impacts).

Response to Comment #266-03:
See Master Response E (Extent of Significant Impacts). Feasible mitigation measures were proposed in the DEIR and have been incorporated into the Draft GP 2020. Additional mitigation measures have been proposed in comments on the DEIR and considered. Of the measures considered, those which have been determined feasible have been included in Draft GP 2020.

Response to Comment #266-04:
The description of the project is provided in Section 2.1 (Proposed Project) and Chapter 3.0 (Project Description) of the DEIR. As a General Plan Program EIR, the level of detail of both the project and the DEIR are conducted at a countywide scale and analyzed at a broad level of detail. See also response to comment #266-07 and Master Response C (Program EIR/Level of Detail).

Response to Comment #266-05:
The impact analysis throughout DEIR Chapter 4.0 (Environmental Setting, Impacts, and Mitigation Measures) considers all of the land uses and development projected to occur under Draft GP 2020. The cumulative impacts of Draft GP 2020, in combination with city development and the identified cumulative projects are addressed in Section 6.2 (Cumulative Impacts) of the DEIR.

Response to Comment #266-06:
See Master Response H (Range of Alternatives).

Response to Comment #266-07:
As noted in the comment footnote, the DEIR analyzes the impacts of all projected land uses and development allowed by Draft GP 2020 under the policies contained in the Draft GP 2020. The amount, type, and location of future land uses is described in the DEIR in Section 2.1 (Proposed Project) and

Chapter 3.0 (Project Description) and subsequently, in each of the topical sections of the impact analysis.

4.1: The Land Use, Population and Housing section identifies future residential, commercial, agricultural, and industrial use.

4.2: The Transportation section identifies the future circulation and transportation network.

4.8: The Agriculture and Timber Resources section identifies future resource use and related uses.

4.9: The Public Services section identifies future public service demands and facility needs.

The location of some of the projected land uses and development under Draft GP 2020 cannot be predicted at this time. For example, public facilities locations are not known until the responsible agency is able to pay for its construction and obtain the rights to develop. Agricultural and Timber resources can generally be located, but the specific location of each harvest or cultivation is unknown. Only residential, commercial, and industrial development can be predicted by its designation on the Draft Land Use Map. See also response to comment #230-43, Master Response C (Program EIR/Level of Detail) and Master Response J (Buildout).

Response to Comment #266-08:
Comment noted. See also Master Response E (Extent of Significant Impacts). With respect to the impact of additional small parcelization referenced in footnote #4 of the comment, Draft GP 2020 Urban Service Boundaries limit new urban development to within the Urban Service Areas surrounding the cities. This is accomplished through low density land use designations and/or restrictive zoning (e.g., the B8 District). The only exception to these restrictions is within the area served by the South Park Sanitation District in Southwest Santa Rosa where urban level of development is allowed subject to approval of a Utility Certificate by the City of Santa Rosa. No additional policies or mitigation measures have been identified or proposed that would increase the potential for efficient development in these areas. With respect to Community Separators, OSRC Program #6 has been added to consider designation of additional lands as Community Separator after a more elaborate effort to include direct outreach to affected property owners.

Response to Comment #266-09:
See Master Response I (Land Use Changes), and Master Response J (Buildout). As the comment points out, the DEIR acknowledges the past rural parcelization of parts of Sonoma County and its effects on habitat. However, the DEIR also points out the restrictions placed upon further rural growth in Section 4.1 (Land Use, Housing, and Population). The impacts of rural development on wildlife and biotic habitat are addressed in Section 4.6 (Biological Resources). The impacts on water resources are addressed in Section 4.5 (Hydrology and Water Resources). The contribution of Draft GP 2020 to cumulative impacts is identified in Section 6.2 (Cumulative Impacts). These impacts are analyzed at an appropriate level of detail for a countywide program EIR, based on the likely level of future uses and development allowed under Draft GP 2020.

With respect to the comment's suggestion of the need for policies to cap growth, see response to comment #266-51. Regarding the VOTMA Study referenced in footnote 9 of the comment, see response to comment #251-08.

Response to Comment #266-10:
The DEIR does conclude that most impacts resulting from Draft GP 2020 on agriculture are less than significant. Section 4.8 (Agricultural and Timber Resources) addresses the impacts of Draft GP 2020 on the County's inventory of agricultural land, including conversion to non-agricultural uses (Impact #4.8-1), conversion to agricultural processing and support uses (Impact #4.8-2), and conversion to agricultural tourism uses (Impact #4.8-3). These impacts are identified as less than significant for the reasons stated in each impact discussion. The DEIR also addresses the land use compatibility impacts resulting from non-agricultural uses in proximity to agricultural operations (Impact #4.1-2). This impact is identified as significant and unavoidable. See also response to comments #266-07, #266-28, #266-59, #266-72 and

Master Response J (Buildout).

With respect to the comment regarding the agricultural feasibility of parcels less than 40 acres, wine grapes are one of those high value crops that can be economically feasible on smaller lots.

In addition, Draft GP 2020 does, in fact, include policies that will avoid detrimental loss of agricultural land from conversion to agricultural support uses (Note that agricultural support services are only one type of agricultural support use allowed on agricultural land). These policies require that support uses be secondary and incidental to agricultural production. Furthermore, as described in the discussion under Impact #4.8-2, policies are included that would reduce the potential for clustering of support uses. Clustering of these uses is considered to be detrimental to agriculture when their concentration results in a commercial or industrial economy that attracts satellite non-agricultural uses that conflict with agricultural production.

Response to Comment #266-11:
As noted in response to comments #266-28, #266-51, and #266-59, the DEIR provides the requisite description of the Draft GP 2020 at a level of detail appropriate for a countywide General Plan and Program EIR. The DEIR utilizes this information to analyze the impacts of Draft GP 2020 on agricultural lands in Section 4.8 (Agricultural and Timber Resources), under Impacts #4.8-1, #4.8-2, and #4.8-3. In addition, the DEIR analyzes a higher level of growth than projected under Draft GP 2020 under the Buildout Alternative in Section 5.0 (Alternatives).

Response to Comment #266-12:
Since the DEIR analyzes the both projected residential development and buildout of Draft GP 2020 land use maps, with only a slight variation based upon the factors identified in Section 5.0 (Alternatives), the rate of parcelization is not relevant to the impact analysis. Information about the density and location of development in the County unincorporated area is determined by examining the Draft GP 2020 Land Use Maps. The extent of agricultural processing and support uses is estimated under Impact #4.8-2.

The impacts of buildout under Draft GP 2020 are identified in Section 5.0 (Alternatives) under the Buildout Alternative. See also Master Response J (Buildout).

Rural development, whether or not it is “clustered”, is not eligible for urban services under Draft GP 2020 or any of the alternatives, and, as such, the costs of these services are not relevant to the project or DEIR. Emergency service impacts are addressed in Section 4-9 (Public Services) of the DEIR under Impact #4.9-9 (Increased Demand for Fire Protection and Emergency Service Facilities) and Impact #4.9-10 (Wildland Fire Hazards). Such service demands are expected to be similar, regardless of whether rural development is scattered or clustered.

Response to Comment #266-13:
See Master Response I (Land Use Changes). The Draft GP 2020 land use maps establish the residential densities on lands designated in the Land Intensive Agriculture Land Use Category. These densities range from 20 to 100 acres per unit, depending upon the location. Contrary to the comment, not all parcels of land in this category are designated at 20 acres per unit. Section 4.1 (Land Use, Housing, and Population) of the DEIR discusses the trend in home costs on page #4.1-8.

Response to Comment #266-14:
The most recent data from the USDA indicate that there are 3,447 farms in Sonoma County with an average size of 182 acres [6].

Response to Comment #266-15:
The uses allowed on each parcel are dependent upon the land use designation and zoning and other

[6] *Number of Farms, Land Area, and Average Size of Farms by County, 2002*, United States Department of Agriculture, available online at http:www.nass.usda.gov/Statistics_by_State/California/Publications/Other_Files/200407farminfo.pdf

policies of Draft GP 2020. The Draft GP 2020 land use designations are generally described in Section 4.1 (Land Use, Population and Housing) of the DEIR, beginning on Page #4.1-3.

Response to Comment #266-16:
See response to comment #266-51 and Master Response J (Buildout).

Response to Comment #266-17:
Prevailing trends in agriculture are described in Draft GP 2020 in Section 2.1 of the Land Use Element and in Section 4.8 (Agricultural and Timber Resources) of the DEIR. The goals, objectives, and policies of the current General Plan and Draft GP2020 provide the necessary land use framework for the continuing success of agriculture in Sonoma County. It is likely that part of the reason for this success is the existing General Plan's land use policies, which are carried forward in Draft GP 2020, restricting residential densities on agricultural lands.

Response to Comment #266-18:
See response to comment #266-13.

Response to Comment #266-19:
This comment does not pertain to the adequacy of the DEIR.

Response to Comment #266-20:
The comment does not pertain to the adequacy of the DEIR.

Response to Comment #266-21:
The DEIR identifies the projected land uses and development in rural areas in Section 4-8 (Agriculture and Timber Resources) under Impact #4.8-1and Impact 4.8-2 (Agricultural Processing and Support Uses). See also response to comment #266-07, #266-11, and #266-12 and Master Response J (Buildout).

Response to Comment #266-22:
As described in Section 4.1 (Land Use, Population, and Housing) of the DEIR (Exhibit #4.1-1), approximately 75,000 acres of land in the unincorporated County are designated for Rural Residential land use on Figures LU-2a through LU-2i of the Land Use Element. This section of the DEIR identifies the number of residential units projected under Draft GP 2020 by year 2020 for each planning area. Public Service Impacts from this growth are identified in Section 4.9 (Public Services) and Section 4-2 (Transportation) of the DEIR, including roads, transit, wastewater, water, and fire and emergency services, etc. See also Master Response C (Program EIR/Level of Detail) and Master Response J (Buildout).

Response to Comment #266-23:
As noted in Section 4.1 (Land Use, Population, and Housing) of the DEIR, the impacts of residential intrusion into agricultural areas results in conflicts that can harm agricultural viability. Draft GP 2020 policies protecting agriculture go a long way to reducing these conflicts, although not to a less than significant level. These policies include Right to Farm protection, agricultural support uses and agricultural tourism, limitations on future residential use, and urban service boundaries, among others.

Response to Comment #266-24:
Comment noted. This comment pertains to a policy issue in Draft GP 2020 and not to the adequacy of the DEIR. The comment's specific concerns regarding the adequacy of the DEIR's analysis of water supply are stated in subsequent comments and are addressed in responses to those comments.

Response to Comment #266-25:
The comment is incorrect in stating that the DEIR does not disclose the development that could occur under Draft GP 2020; see response to comment #266-07 and #266-15. In addition, the level of growth allowed under the Buildout Alternative is described in Section 5.0 (Alternatives). See also Master Response J (Buildout) and Master Response H (Range of Alternatives).

Response to Comment #266-26:
Comment noted. As noted in Section 4.9 (Public Services) of the DEIR, Draft GP 2020 includes two policies (Policy WR-3i for water systems and Policy PF-1b for wastewater systems) that provide for consideration of moratoria on new development in areas where water or wastewater services are found to be inadequate to meet demand. In addition, water and wastewater providers have the opportunity to inform the County of their capacity or lack of capacity to serve projects through the existing discretionary review referral process.

Response to Comment #266-27:
As noted in previous response to comments #266-07, #266-15, #266-25, and in the cited sections of the DEIR, the projected growth accommodated by Draft GP 2020 is identified and its impacts described and assessed. The impacts of the Draft GP 2020 land uses and development on water resources and wastewater systems is identified and discussed in Sections 4.5 (Hydrology and Water Resources,) and Section 4.9 (Public Services). In addition, the impacts of the Buildout Alternative are identified in Section 5.0 (Alternatives). See also Master Response S (Water Supply) and Master Response H (Range of Alternatives).

Response to Comment #266-28:
Regarding water supply, see Master Response S (Water Supply). The remainder of this comment requests a level of detail regarding future development that is not possible to determine as part of a General Plan, particularly for a large rural county. Neither is it appropriate for the level of detail required in a Program EIR. In actuality, the number of wells and septic systems is not likely to be a good measure of the level of growth and development, nor are these factors an indicator of water supply or water quality impacts. Better indicators are the amount of water drawn in relation to availability for groundwater supply and the quality of water discharged to groundwater for groundwater quality. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #266-29:
Comment noted. Contrary to the comment, the DEIR does not propose or suggest that completion of groundwater studies be completed before approval of any new development. In fact, the DEIR, on Page #4.5-54, concludes that restrictions on groundwater usage without well-established scientific basis may run afoul of water related property rights. See also Master Response R (Groundwater Management).

Response to Comment #266-30:
See response to comment #266-07.

Response to Comment #266-31:
See response to comment #266-28.

Response to Comment #266-32:
This comment does not pertain to the adequacy of the DEIR.

Response to Comment #266-33:
See response to comment #266-28.

Response to Comment #266-34:
See response to comment #266-28.

Response to Comment #266-35:
See response to comment #266-28.

Response to Comment #266-36:
This comment does not pertain to the adequacy of the DEIR.

Response to Comment #266-37:

The physical impacts of all land uses and development likely to occur under Draft GP 2020 on water supply urban and rural areas is addressed in Section 4.9 (Public Services) of the DEIR, specifically under Impacts #4.9-1, #4.9-2, and #4.9-3.

Response to Comment #266-38:
Although the additional mitigation measures identified in the DEIR consist of roadway improvements, DEIR Sections 4.2 (Transportation) and 4.4 (Air Quality) identify the numerous Draft GP 2020 goals, objectives, and policies that support transit and non-automobile modes of travel in Sonoma County. See Master Response I (Land Use Changes) and Master Response N (Climate Change).

Response to Comment #266-39:
Traffic modeling conducted for Draft GP 2020 and Section 4.2 (Transportation) of the DEIR utilize projected land uses and development from the Land Use Element. However, changes in land use are not part of Draft GP 2020. The Draft GP 2020 contribution to cumulative traffic impacts is identified in Section 6.2 (Cumulative Impacts) of the DEIR. See also Master Response I (Land Use Changes).

Response to Comment #266-40:
Because impacts to the countywide transportation system are the result of regional development and land use, analysis is based on the assumption that all planned improvements are constructed and growth in the cities is consistent with each jurisdiction's adopted General Plan. The County's contribution to these impacts is identified in Section 6.2 (Cumulative Impacts) of the DEIR at a level of detail appropriate for a countywide General Plan. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #266-41:
See Master Response I (Land Use Changes).

Response to Comment #266-42:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 Circulation and Transit Element includes Section 3 containing the proposed policies to promote and coordinate transit service.

Response to Comment #266-43:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Section 3 of the Draft GP 2020 Circulation and Transit Element and Section 9.2 of the Draft GP 2020 Open Space and Resource Conservation Element include relevant policies that promote non-vehicular transportation modes.

Response to Comment #266-44:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. See also response to comment #266-42 and #266-43.

Response to Comment #266-45:
See response to comment #266-28 and Master Response C (Program EIR/Level of Detail).

Response to Comment #266-46:
The project analyzed in the DEIR is described in Section 2.1 (Proposed Project) and Section 3.3 (Description of the Draft GP 2020). As described on DEIR page #4.0-1, the DEIR analyzes the impacts of all future uses and development likely to occur under Draft GP 2020, including a limited number of Land Use Map amendments, in comparison to the existing environment. The Land Use Map amendments are described on pages #4.1-10 through #4.1-22. See also response to comment #266-47 and Master Response J (Buildout).

Response to Comment #266-47:
The comment expresses several basic principles of CEQA regarding the need for a General Plan EIR to address the impacts of future growth under its proposed policies. As described on DEIR pages #2.0-2, #3.0-14, #4.0-1, and #4.1-30 through #4.1-32, the DEIR follows these principles explicitly by identifying

the projected growth, including all land uses and development likely to occur under Draft GP 2020, and comparing it to the existing environment. The DEIR also analyzes a "worst case" scenario, in which future land uses and development reach the theoretical capacity of the land use maps, in the Buildout Alternative in Section 5.0 (Alternatives) of the DEIR. See also Master Response H (Range of Alternatives) and Master Response J (Buildout).

Response to Comment #266-48:
The comment asserts that the Draft GP 2020 would allow significantly more growth than the projected increase of 19,100 new residents, yet provides no basis or explanation of this assertion. The DEIR, in Section 3.0 (Project Description), and the Draft GP 2020 Land Use Element are clear about the level of projected population growth in the unincorporated County, based upon PRMD analysis of the capacity of the land use maps and other factors. The DEIR also identifies the theoretical maximum holding capacity (buildout) of the Draft GP 2020 which is analyzed in Section 5.0 (Alternatives). As described on DEIR page #5.0-38, this level of growth is unlikely to occur. See also Master Response J (Buildout) and Master Response H (Range of Alternatives).

Response to Comment #266-49:
For informational purposes, the DEIR often provides the reader with a useful comparison of what would occur under the current General Plan versus what would occur under the Draft GP 2020. However, for purposes of establishing the significance of potential environmental impacts, the DEIR analyzes the impacts of projected growth under Draft GP 2020 on the existing environment, as described on DEIR page #4.0-1. The example given in the comment is one of the instances in which the DEIR provides a comparison of the consequences of projected growth under both the current General Plan and the Draft GP 2020. The comment fails to note that the entire discussion of growth impacts that precedes that example addresses the impacts of projected growth on the existing environment.

The comment states that proposed Policy LU-2a fails to mitigate the impacts of projected growth. In fact, that policy is only one of a number of policies that control growth within the unincorporated areas of the county, directing growth to cities and selected unincorporated communities. It should be noted that the discussion of the impacts of projected growth under GP 2020 is not limited to the section of the DEIR on land use, population, and housing, but occurs throughout the DEIR in the discussion of each impact area.

Response to Comment #266-50:
The services and infrastructure needed to serve the projected growth under Draft GP2020 are identified and described in Section 4.2 (Transportation) and Section 4.9 (Public Services) of the DEIR. See also Section 4.1 (Land Use, Population, and Housing), pages #4.1-30 through #4.1-32.

Response to Comment #266-51:
As noted in the response to comment #266-28, the detailed information about each parcel of land in the unincorporated area is not readily available and would require unnecessarily exhaustive field work to complete. More importantly, this level of detail is neither appropriate nor required by CEQA for a program level EIR for a countywide general plan. Instead, the Draft GP 2020 utilized Census 2000 data and assessor parcel data to establish the baseline condition and utilized ABAG projections and PRMD estimates of remaining development potential from the land use maps, parcel sizes, and the likely constraints to development based upon environmental, service, economic, and other factors to determine projected growth. The Buildout Alternative in Section 5.0 (Alternatives) utilized the same land use maps, but assumed that growth would not be constrained by such factors, and that it would exceed all of the ABAG and PRMD projections, thereby approximating the maximum theoretical holding capacity of the land use map (see Exhibit #5.0-1). As a result, the land use map itself operates as a limitation on future development, rendering unnecessary any arbitrary "caps" on development.

This methodology and level of detail is sufficient and appropriate for a General Plan and Program EIR. See also Master Response I (Land Use Changes), Master Response C (Program EIR/Level of Detail), Master Response R (Groundwater Management), and Master Response H (Range of Alternatives).

Response to Comment #266-52:

The Draft GP 2020 uses consistent projections of growth for the County and its cities. The DEIR uses the same projections as Draft GP 2020 for all areas of topical analysis. The comment appears to confuse projected growth and buildout. Projected growth, summarized in the Draft Land Use Element and in Section 4.1 (Land Use, Population, and Housing) of the DEIR, is the amount of growth that is anticipated in Draft GP 2020. The projected growth was developed using a combination of factors identified in response to comment #266-51. On the other hand, buildout assumes that every property owner wants to build, that environmental constraints do not affect development, and that economic motivation to develop is greater.. Buildout is the amount of growth analyzed in the Buildout Alternative in Section 5.0 (Alternatives) of the DEIR, and is included in the DEIR alternatives so that its impacts can be compared to those of the project under various policy options. See also Master Response J (Buildout) and Master Response H (Range of Alternatives).

Response to Comment #266-53:
As noted in response to comment #266-52, the DEIR uses the same growth projections for all areas of topical analysis. The only substantial variation in the growth utilized in the DEIR is among the alternatives in Section 5.0 (Alternatives). See also Master Response H (Range of Alternatives).

Response to Comment #266-54:
The comment's specific concerns regarding the adequacy of the DEIR are stated in subsequent comments and are addressed in responses to those comments.

Response to Comment #266-55:
The DEIR identifies mitigation measures (policies) in the topical sections that are already included in the proposed project and identifies proposed new mitigation measures that would further reduce impacts. In addition, many comments on the DEIR and testimony during public hearings on the Draft GP 2020 identify potential mitigation measures that have been incorporated into Draft GP 2020 or are recommended in the responses to comments on this DEIR.

Response to Comment #266-56:
The DEIR in Section 4.6 (Biological Resources) under Impacts #4.6-1, #4.6-2, and #4.6-4 is clear that the location and extent of special status species, sensitive natural communities, and wildlife habitat are not sufficiently known by the scientific community for the kind of detailed analysis suggested by the comment. In addition, the feasibility of the county forecasting and identifying detailed development plans for every parcel of land over almost 1,000,000 acres is infeasible and would be highly speculative in any case. The level of detail in the DEIR is appropriate for a General Plan and adequate for decision makers to choose among policy options while taking into consideration the environmental consequences of those options. See Master Response C (Program EIR/Level of Detail) and Master Response J (Buildout).

Response to Comment #266-57:
Contrary to the comment, the DEIR analyzes the impacts of proposed Draft GP 2020 compared to the existing environment in each of the topical sections in Chapter 4. This is stated in the introduction to Chapter 4. The impacts of continuing forward under the current General Plan are analyzed in Section 5.0 (Alternatives) under the No Project Alternative. This section also compares the impacts of the No Project Alternative to the impacts of the proposed project. Cumulative impacts are addressed in Section 6.2 (Cumulative Impacts).

Response to Comment #266-58:
Although it is unclear what the comment refers to when it refers to"harmful development" in areas of sensitive resources, the justification for limiting subdivisions or charging a mitigation fee in areas of high value habitat is not feasible until such "high value habitats" are identified and appropriate mitigation is established, as provided in the policies and programs of the Draft GP 2020 Open Space and Resource Conservation Element. The analysis and conclusions of the DEIR are sufficiently detailed for purposes of a General Plan and Program EIR. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #266-59:
The statement in Section 4.8 (Agriculture and Timber Resources) of the DEIR that data are not available

to quantify the acreage that might be affected by housing, mining, recreation and community services is accurate. As noted in response to comment #266-56, to attempt to estimate the location and extent of these uses throughout the County would require exhaustive research and would be highly speculative. Coupled with the fact that there appears to be about 800,000 acres of land in Sonoma County that is available for agricultural use, and the fact that agriculture remains quite viable today with these other uses in existence, the DEIR's conclusion is reasonable.

The comment also recommends that the Draft GP 2020 include additional mitigation measures to reduce the impacts on agricultural production. The recommended measures in the Alameda County South Livermore Valley Area Plan, if applied to Sonoma County, would actually increase the loss of agricultural production by increasing the potential for non-agricultural use of agricultural lands. For example, the Plan has three basic components:

1. It allows a parcel to increase residential development five-fold in exchange for maintaining agriculture on the remaining acreage. Draft GP 2020 would not allow such an increase in residential development.

2. It allows urban development to encroach into agricultural lands. Draft GP 2020 would not allow such an encroachment

3. It provides for purchasing easements to protect agricultural land. Draft GP 2020 supports continuation of the Sonoma County Agriculture and Open Space Preservation District, which accomplishes the same purpose, but without having to allow additional development in order to obtain funding.

See also Master Response I (Land Use Changes).

In addition, the existing Sonoma County General Plan, as well as Draft GP 2020, includes virtually every agricultural protection policy or measure known to be available and effective, including a Right to Farm Ordinance, Urban Growth Boundaries, low residential densities, and the Williamson Act. These policies and measures support the conclusion in the DEIR that impacts to agricultural resources would be less than significant. As a result, the additional measures are not necessary to further reduce these impacts of Draft GP 2020.

Response to Comment #266-60:
Contrary to the comment, Section 4.8 (Agricultural and Timber Resources) of the DEIR addresses the loss of agricultural land due to Draft GP 2020. Agricultural easements are an existing tool for preserving agricultural land and are supported by the Draft GP 2020 Agricultural Resources Element Policies AR-3e and AR-8a and by the Open Space and Resource Conservation Element Policies OSRC-2f and OSRC-1d. With respect to the examples of mitigation programs, these programs allow non-agricultural development to encroach into agricultural areas, resulting in the loss of agricultural land that is currently not allowed by Draft GP 2020. See also response to comment #266-59.

Response to Comment #266-61:
See responses to comments #266-59 and #266-60.

Response to Comment #266-62:
Contrary to the comment, the DEIR analyzes the adequacy of water supply in Section 4.9 (Public Services) under Impact #4.9-1 and #4.9-2. This analysis is consistent with the growth projected under Draft GP 2020 as described in response to comment #266-47 and #266-52. The DEIR concludes that adequate water supply may not be sufficient to meet demand due primarily to the uncertainty of future groundwater and surface water sources. Draft GP 2020 includes Policy WR-3i that supports appropriate actions by the County to address a situation where water supplies are not adequate. See also Master Response S (Water Supply).

Response to Comment #266-63:
The impacts of Draft GP 2020 on wastewater services are addressed in Section 4.9 (Public Services) of the DEIR, under Impact #4.9-4 and #4.9-5. The analysis is consistent with the growth projected under Draft GP 2020 as described in response to comment #266-47 and #266-52.

See response to comment #237-20 and #237-24 regarding package treatment plants.

Response to Comment #266-64:
The DEIR addresses the Draft GP 2020 impacts on water quality in Section 4.5 (Hydrology and Water Resources). The comment is unclear as to what information is lacking.

Response to Comment #266-65:
Contrary to the comment, the DEIR identifies mitigation measures to further reduce the impacts of Draft GP 2020. Additional mitigation measures #4.5-3(a) and #4.5-3(b) are identified under Impact #4.9-2. In addition, Draft GP 2020 includes policies supporting moratoria on development where necessary to address situations where the water supplier or wastewater provider does not have the wherewithal to serve future or pending development (Policy WR-3i and Policy PF-1b).

The comment also suggests a moratorium on all development until a groundwater management plan is completed. As noted in the response to comment #262-50, the basis for such a moratorium has not been established, either technically or legally. In addition, a moratorium would not be appropriate for a policy document such as a General Plan. Such moratoria are more appropriately enacted by ordinance based upon facts in evidence at the time. See also Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #266-67:
Section 4.3 (Air Quality) of the DEIR analyzed air quality impacts of the projected growth under Draft GP 2020. The traffic and air quality impacts of full buildout are described in Section 5.0 (Alternatives) under the Buildout Alternative. See also responses to comments #266-46, #266-47, and #266-48 through #266-51, and Master Response J (Buildout).

Response to Comment #266-68:
As noted in response to comment #266-67, Sections 4.2 (Transportation) and 4.3 (Air Quality) address these impacts of Draft GP 2020. In addition, Draft GP 2020 provides both policies and land use maps that promote urban-centered growth in order to reduce reliance upon the automobile. The Draft Circulation Element also promotes increased transit, bicycle, and pedestrian travel.

Response to Comment #266-69:
See response to comment #266-68. Section 4.1 (Land Use, Population, and Housing) of the DEIR analyzes the impacts of Draft GP 2020 affordable housing sites under Impact #4.1-4 at a General Plan level of detail. The specific impacts of each project would be addressed as part of the project's environmental review. See Master Response C (Program EIR/Level of Detail).

Response to Comment #266-70:
Section 4.9 (Public Services) of the DEIR addresses the impacts of the proposed project on public services, including the availability of sewer and water services to development within urban service areas where affordable housing sites are proposed to be located.

Response to Comment #266-71:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. Sonoma County has attempted in the past to negotiate such agreements and has not been successful. Since the agreements would require approval by another jurisdiction, their potential to reduce impacts of Draft GP 2020 is questionable. See Master Response B (Jurisdiction) and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #266-72:
The comment recommends additional mitigation measures in the form of proposed new policies that would limit development in rural areas to protect biological resources. The proposed polices include:

1. develop an agreement between the County and cities for transfer of the County's Regional Housing Need to one or more of the cities

2. adopt a countywide growth management system which allocates building permits on an annual basis

3. cooperative planning and project review within the spheres of influence of the cities

4. establish criteria for ranchette development that requires a General Plan amendment

5. adopt a prohibition on new residential or suburban subdivisions in agricultural areas

6. allow additional dwelling units on farm ranches subject to criteria

7. adopt criteria for subdivisions in rural areas

Section 4.6 (Biological Resources) of the DEIR addresses the impacts of Draft GP 2020 on biological resources, generally concluding that the lack of available comprehensive data regarding habitat conditions in the County makes it likely that disturbances will occur from ministerial or permitted land uses in spite of the numerous policies and programs that would reduce these impacts over time. Notwithstanding the likelihood of future impacts, the policies and programs in Draft GP 2020 provide equivalent or in some cases better mitigation than the measures suggested by the comment.

For example, the County has adopted growth management programs for two areas of the County that have experienced problems related to the rate of growth. Growth management in other areas has not been necessary as the growth rates have been consistent with projections. Therefore, a countywide allocation of building permits is unjustified. Draft GP 2020 includes polices, such as Policy LU-1g and LU-1i, that support and enable growth management systems to be established if needed in the future.

Draft GP 2020 also provides for cooperative planning in areas adjacent to the cities. In fact, some land use changes are proposed within the Santa Rosa Urban Service Area to assure consistency of land use policies between the City and the County in this area.

Draft GP 2020 does not include policies that would support General Plan Amendments for additional ranchette development or additional residential subdivisions beyond what the rural land use density would allow. Such policies would promote sprawl, undermine agriculture, and allow development that would exceed the County's ability to efficiently provide services.

Draft GP 2020 does not include an update of the County's Housing Element, which was certified by the State in 2002 under the State's mandated time frame. The Housing Element is the appropriate policy document to address the methods by which the County would meet its obligations for future housing needs. As a result, the potential for transfer agreements would be considered as part of the next Housing Element update. It should also be noted that State law dictates the methods and criteria for transfer of housing responsibilities and the requirements are difficult to meet. In addition, the cities have so far been unwilling to agree to consider transfers, rendering this policy infeasible as a mitigation measure.

Response to Comment #266-73:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. Additional Community Separator lands have not been designated in Draft GP 2020 at this time due to the desire to involve affected property owners more directly in the proposal. However, Draft GP 2020 includes OSRC Program

#6 to consider additional Community Separators in the future. The comment does not explain what impact would be mitigated by the proposed changes to the Community Separators. However, Community Separators serve to reduce urban sprawl and mitigate the Draft GP 2020 impacts on growth and concentration of population in Section 4.1 (Land Use, Population, and Housing) of the DEIR. Since this impact is identified as less than significant, no further mitigation is required under CEQA.

Response to Comment #266-74:
The comment does not state the impact that this measure would reduce. Outright prohibition of places of religious worship, schools, and hospitals would not be feasible or effective for several reasons. First, these uses are needed throughout the County to serve existing residents in outlying areas. Second, federal law pre-empts the County's ability to prohibit places of religious worship. Third, schools and hospitals are frequently sited by special districts or other non-County entities that need not comply with local land use policies. Draft GP 2020 places reasonable limits on these uses in order to encourage their location in and near urban areas.

Response to Comment #266-75:
Draft GP 2020 already contains policies and programs for implementation of Transfer of Development Rights. See Policies AR-2d, AR-8d, and Agricultural Resources Program #4.

Response to Comment #266-76:
See response to comment #266-59 and #266-60.

Response to Comment #266-77:
See response to comment #266-59 and #266-60.

Response to Comment #266-78:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The agricultural uses that do not require a permit from the County are specified in the County Zoning Code.

Response to Comment #266-79:
Section 4.8 (Agricultural and Timber Resources) of the DEIR identifies the conversion of agricultural land as a less than significant impacts not requiring further mitigation. See also response to comment #266-59 and #266-60.

Response to Comment #266-80:
The Draft GP 2020 Agricultural Resources Element provides Policies AR-4a, AR-7a, AR-7b, AR-7f, and AR-7g for housing opportunities in agricultural areas for farm families and farmworkers, coupled with County Zoning Code provisions that limit this housing to this purpose

Response to Comment #266-81:
See response to comment #266-71 and #266-72.

Response to Comment #266-82:
Land use designations under Draft GP 2020 include high density residential and mixed use opportunities in transit-served areas. As a result, an overlay district is not necessary to accomplish the comment's purpose.

Response to Comment #266-83:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 Open Space and Resource Conservation Element Sections 2.5 and 2.6 include policies and programs for urban design and rural character that would accomplish this purpose.

Response to Comment #266-84:
See Master Response E (Extent of Significant Impacts). The suggested mitigation measures listed in comments #266-72 through #266-83 have been presented to the decision making bodies for consideration. However, as noted in the responses to these comments, none of the measures would

significantly reduce the inevitable incompatibility of rural land uses identified under Impact #4.1-3 while still meeting basic project objectives of Draft GP 2020.

Response to Comment #266-85:
As noted in response to comment #266-48, #266-51, and #266-52, the land use maps establish the capacity of the Draft GP 2020 to accommodate projected growth. As a result, no additional ”cap” is necessary and the Draft GP 2020 projections are correlated with the land use designations. See the Draft GP 2020 Land Use Element regarding the rate of historic and projected growth.

Response to Comment #266-86:
Contrary to the comment, the DEIR analyzes the impacts of all land uses and development projected under Draft GP 2020 from wastewater disposal. In addition, the Buildout Alternative in Section 5.0 (Alternatives) identifies the impacts of a greater level of development than projected. See response to comment #266-47, #266-48, and #266-51. As described under Impact #4.5-4, the DEIR concludes that the impacts regarding wastewater disposal are less than significant due to the Draft GP 2020 policies and the fact that all future wastewater disposal systems would be subject to the requirements of the RWQCB and other responsible agencies.

Response to Comment #266-87:
As noted in Section 4.8 (Agricultural and Timber Resources) of the DEIR, Draft GP 2020 and existing County policy include numerous provisions to avoid conversion of agricultural lands to non-agricultural uses, including urban service boundaries, low rural densities, limits on agricultural support uses and agricultural tourism. As a result, the conclusion that this impact is less than significant is justified. See also response to comment # 266-07 and #266-10.

Response to Comment #266-88:
See Response to Comment #266-47. The comment is incorrect in its statement that, under Impact #4.8-2, the DEIR concluded that the impacts of agricultural processing and support uses will be less than significant. Impact #4.8-2 analyzes only the loss of agricultural land as a result of these uses. The impacts of these uses on other aspects of the environment are addressed throughout other topical sections of the DEIR. See Master Response C (Program EIR/Level of Detail).

Response to Comment #266-89:
Contrary to the comment, the DEIR does not conclude that the impacts of agricultural tourism uses are less than significant. Rather, the DEIR, in Section 4.8 (Agricultural and Timber Resources) concludes under Impact #4.8-3 that conversion of agricultural land to tourism use is less than significant. The impacts of all land uses and development, including agricultural tourism, are addressed in each of the topical sections. It is too speculative to predict the number and location of future agricultural tourism operations under Draft GP 2020. Exhibit #4.8-4 provides an estimate of agricultural support uses, including tourism facilities. Impact #4.8-3 contains extensive analysis of the issue and provides the rationale for concluding that this impact is less than significant

Response to Comment #266-90:
See Master Response H (Range of Alternatives).

Response to Comment #266-91:
Contrary to the comment, the DEIR identifies 38 significant and unavoidable impacts with development and uses likely to occur under Draft GP 2020. The DEIR identifies 51 impacts which are significant and unavoidable under the Buildout Alternative. See Master Responses B (Jurisdiction), Master Response D (Effectiveness of Mitigation Measures), and Master Response F (Explanation for Lack of Mitigation Measures). For many reasons, it is not feasible for GP 2020 to fully mitigate all of the impacts of all future land uses and development under Draft GP 2020. As noted Master Response G (Recirculation), the mere fact the project results in significant impacts does not trigger recirculation.

The comment suggests that an alternative be evaluated that includes a limitation on future subdivisions and expansion of urban areas. However, Draft GP 2020 already includes policies that limit sprawl and

favor locating urban growth in existing cities and urban areas. In addition, a restriction against all subdivisions is not feasible if the County is to meet its affordable housing mandates under State law.

Draft GP 2020 establishes Urban Service Areas that primarily follow existing public sewer district boundaries rather than accommodating expansion. Draft GP 2020 concentrates most development inside Urban Service Areas and follows a constraints-based system for reviewing development applications. Project objectives for Draft GP 2020 do not include changes in the existing land use designations except under very narrow circumstances. See Master Response I (Land Use Changes).

Response to Comment #266-92:
Comment noted. See Master Response G (Recirculation). Sonoma County has a "world class environment" and is a "magnificent place to live" in part because of the goals, objectives, and policies in the existing General Plan, which are carried forward and in many cases strengthened in Draft GP 2020. Draft GP 2020 will go a long way to preserve and enhance Sonoma County's landscapes, its agricultural economy, and the quality of life enjoyed by County residents.

Response to Comment #267-01:
The effects of "non-tariff barriers to trade" and "the potential impact of these agreements on the duty and ability of the country to carry out the goals and mitigation measures and/or alternatives described in the General Plan 2020 Draft Environmental Impact Report" is beyond the scope of the DEIR. Economic and social effects are not considered environmental effects under CEQA. These effects need be considered in EIRs only if they would lead to a physical environmental impact. The comment fails to explain any environmental impact related to the economic factors cited.

Response to Comment #267-02:
Predicting the effects of current and future trade agreements will have on "the set of laws governing land-use fundamental to the planning and regulatory framework of the GP 2020 Draft EIR" as well as "laws protecting county surface and groundwater resources such as those in the air quality and transportation sections" would be speculative and beyond the scope of the EIR.

Response to Comment #267-03:
Whether the land use and planning goals of the Draft GP 2020 and the mitigation measures and alternatives described in the DEIR would "trigger a trade dispute" or that a challenge to laws that govern land use planning in Sonoma County by a foreign corporation would create a serious "crisis in jurisdiction" is beyond the scope of the DEIR.

Response to Comment #268-01:
As suggested, the referenced paragraphs on page #4.5-13 in Section 4.5 (Hydrology and Water Resources) are revised as follows:

> "Major portions of this subbasin consist of grassland and pasture areas, with some vineyards, and apple orchards. The higher lying slopes are covered with oak woodlands and Douglas fir forest. **The Wilson Grove Upland area provides prime recharge land for the subbasin and for the City of Sebastopol.**
>
> Inadequate channel capacities along Atascadero Creek result in flooding problems in the outskirts of the City of Sebastopol during high-intensity, short-duration storm events.
> **The subbasin is habitat for federally listed threatened and endangered species, including steelhead, coho salmon, and California freshwater shrimp.** There are two large rock quarries located in this subbasin, just outside of Forestville. The expansion of these two quarries has raised concerns regarding water quality and salmonid habitat along portions of Green Valley Creek. The increase in rural residential development in this area may also be affecting water quality in the subbasin."

Response to Comment #268-02:

Comment noted. Although the comment does not pertain to the adequacy of the DEIR, Section 4.5 (Hydrology and Water Resources) addresses the impacts of Draft GP 2020 on groundwater levels and acknowledges the uncertainties regarding groundwater described in the comment. See also Master Response R (Groundwater Management).

Response to Comment #268-03:
Comment noted. The comment pertains to existing conditions rather than the impacts of the Draft GP 2020. Water quality conditions and impacts are addressed in Section 4.5 (Hydrology and Water Resources) at a countywide, program level of detail appropriate for a General Plan. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #268-04:
While there is general consensus that early logging practices were not conducted in an ecologically sound manner and contributed to erosion and sedimentation, the Draft EIR is not responsible for addressing the impacts resulting from past actions or prior General Plans. Timber harvest plan review and associated environmental review are conducted by the California Department of Forestry and Fire protection and are not under the jurisdiction of the County. See also Master Response B (Jurisdiction).

Response to Comment #269-01:
The referenced water supply estimate represents only the portion of demand served by the Sonoma County Water Agency (SCWA), a wholesale provider primarily for the Cities rather than for the County unincorporated area. Estimates of demand and supply for the providers and individual well owners in the unincorporated area is provided in the remainder of the Water Resources Subsection of Section 4-9 (Public Services) of the DEIR. In addition, the DEIR, in its assessment of water supply for SCWA customers in Exhibit #4.9-8, concludes that agency customers may not have adequate water in the future due to the uncertainty of obtaining approval for additional diversions from the State. See also Master Response S (Water Supply).

Response to Comment #269-02:
See Master Response N (Climate Change).

Response to Comment #269-03:
See Master Response P (Urban Water Management Plans).

Response to Comment #269-04:
As the comment notes, decisions to export surface water from Sonoma County are not within the jurisdiction of the County of Sonoma. The impacts of any such exports would be addressed by the applicable lead agency for the specific export project at the time that it is proposed. Policies WR-5a and WR-5b provide the maximum feasible mitigation for this impact at the General Plan level. The DEIR addresses all of the impacts on water resources of Draft GP 2020 that can reasonably be anticipated, including additional reliance on groundwater and surface waters, from future land uses and development in Section 4.5 (Hydrology and Water Resources) and Section 4.9 (Public Services).

With respect to exports of groundwater, see response to comment #235-25.

Response to Comment #269-05:
See response to comment #235-21.

Response to Comment #269-06:
See response to comment #6-08. Draft GP 2020 Policy OSRC-8k and OSRC Program 19 call for a comprehensive study of riparian corridors in grazing areas.

Response to Comment #269-07:
The first sentence summarizes the potential impacts of Draft GP 2020 that are more fully explained and described in the DEIR text that follows. The second sentence summarizes the conclusion of the DEIR text. In this case, the DEIR concluded that, although the impact was potentially significant, there were

sufficient policies in the Draft GP 2020 to reduce the impact to a less than significant level.

Response to Comment #269-08:
The proposed policy for Section 2.2 of the Public Facilities and Services Element regarding package treatment plants is similar to Draft GP 2020 Policies PF-1k and PF-1l, which call for these facilities to meet applicable health standards and provide long term management. Since package treatment plants offer improved water quality protection compared to standard septic systems, less use of them would result in a greater water quality impact.

Response to Comment #269-09:
See Master Response R (Groundwater Management) and response to comment #235-24. Establishment of a special district would not be within the jurisdiction of the County of Sonoma. In addition, if such a district were created, its groundwater management actions and programs would not be within the County's jurisdiction.

Response to Comment #269-10:
Comment noted. The proposed policy revision has been presented to the decision making bodies for consideration. See response to comment #262-46.

Response to Comment #269-11:
The necessity for areas of the County, especially those with relatively abundant groundwater supplies, to be subject to regulation of water usage through the project review process has not been substantiated by scientific analysis or justified legally. The Draft GP 2020 Water Resource Element establishes appropriate policies to apply groundwater management actions where such science and legal justification is found to exist. Contrary to the comment, CEQA does not recognize a "modified CEQA process"; establishing a process that involves discretionary regulations for agricultural and residential wells would render these ministerial permits discretionary and subject to full CEQA analysis. Whether that is desirable or feasible is a policy decision for the Board of Supervisors.

Response to Comment #269-12:
As noted in Section 4.5 (Hydrology and Water Resources) of the DEIR, under Impact #4.5-6, the reason cited for the less than significant impact regarding saltwater intrusion is the relatively low future groundwater demand in the areas of the County that might be susceptible to this problem. See also response to comment #269-09 and #269-11 and Master Response R (Groundwater Management).

Response to Comment #269-13:
See response to comment #269-11. The definition of "high capacity" would be determined during the preparation and adoption of the well ordinance that would follow the adoption of the General Plan. The suggested additions regarding notification and monitoring would also be determined during the ordinance adoption process. Since the effectiveness of such notification and monitoring would not be known until these actions were developed and implemented, they cannot be relied upon at this time to further reduce the impacts of Draft GP 2020. See Master Response C (Program EIR/Level of Detail) and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #269-14:
This comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR.

Response to Comment #269-15:
Comment noted. See response to comment #1-14.

Response to Comment #270-01:
The DEIR refers to the decline in apple production on page #4.8-1. Olives are among the "other fruits and nuts" mentioned on page #4.8-2 and are specifically mentioned on page #4.8-8 under local agricultural processing. The DEIR provides an analysis of the physical environmental impacts of the adoption of Draft GP 2020. The comment does not identify the environmental impacts that the DEIR fails to address. Rather, the comment appears to state a preferred policy direction for the County regarding

diversification of agriculture. Draft GP 2020 acknowledges past, current, and future trends in agriculture in Section 2.1 of the Land Use Element, and includes policies to encourage, but not mandate diversification of agricultural production such as Policy AR-1e supporting diverse family farms and Policy AR-1f supporting organic agricultural production and other diverse agricultural products. Section 2.10 supports aquaculture. Section 2.11 supports the horse industry. Policy AR-8h fosters agricultural diversity. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #270-02:
Since the Draft GP 2020 is a countywide policy document, and the DEIR is intended to address the impacts of the Draft GP 2020, a countywide analysis provides the appropriate level of detail. See also Master Response C (Program EIR/Level of Detail).

The thirty (30) acres of agriculture in the Oakmont development are located within the City of Santa Rosa and are not counted in the total acreage available for agriculture. Neither is the Sonoma Country Inn, which was approved on land designated for commercial use.

Response to Comment #270-03:
See response to comment #251-08. The Draft GP 2020 land use maps designate residential densities in agricultural areas that are consistent with agricultural production and the need for "working landscapes" in the County. Most relatively small lots in agricultural areas were approved in the past, prior to the advent of the County's policy initiatives to protect agriculture.

Response to Comment #270-04:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Draft GP 2020 Policies AR-5a and AR-5b no longer express a percentage related to agricultural processing, in recognition of the difficulty in enforcing a strict percentage of production, as well as the need for growers to adjust to the economic cycles of production.

Response to Comment #270-05:
The impacts of agricultural tourism, or visitor-serving uses, which is one of the uses that would occur under Draft GP 2020, are analyzed on a cumulative basis with other uses under Draft GP 2020 in each of the topical sections of the DEIR. As noted in Section 4.8 (Agricultural and Timber Resources) of the DEIR, Draft GP 2020 includes Sections 2.5 and 2.6 of the Agricultural Resources Element that establish policies that support agricultural tourism in order to maintain the viability of agriculture. These policies also limit these uses to those that are incidental and proportional to production and do not result in an over-concentration.

Response to Comment #270-06:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Draft GP 2020 supports the activities of the Sonoma County Agricultural Preservation and Open Space District.

Response to Comment #270-07:
The Sonoma County Agricultural Preservation and Open Space District is not under the jurisdiction of Sonoma County. See also response to comment #251-07 and Master Response B (Jurisdiction).

Response to Comment #270-08:
The DEIR's estimate of future vineyard and development and associated processing and tourism uses was based upon past trends and estimates developed with the aid of vineyard industry experts and is presented in Section 4.8 (Agricultural and Timber Resources) under impacts #4.8-2 and #4.8-3. In fact, the industry representatives who assisted with the estimate have since commented, in letter #233 and in testimony at the March 15, 2006 public hearing in comment #290, that both the projected growth and buildout are overstated and exaggerate the future development that is likely to be economically feasible.

In addition, an increase in the number of parcels that can potentially be created through subdivision is not a good indicator of the extent of future agricultural development. This is primarily because the theoretical capacity of land for agricultural use is more likely to be the capability to grow crops or accommodate

related support use, not lot size. In fact, larger parcel sizes may result in greater likelihood of agricultural uses and less likelihood of incompatible residential uses.

Response to Comment #270-09:
See response to comment #270-08. The subdivision of agricultural lands under Draft GP 2020 would be subject to the density regulations of the Land Use Maps as well as the agricultural protection policies of the Draft GP 2020 Agricultural Resources and Open Space and Resource Conservation Elements. Subdivision of agricultural lands is generally subject to approval by the Project Review and Advisory Committee and/or the Planning Commission, with Board review only in the event of an appeal or linkage with a General Plan or zoning change.

Response to Comment #270-10:
See response to comment #251-08.

Response to Comment #270-11:
As noted on DEIR page #4.8-26, Impact #4.8-3 (Agricultural Tourism) analyzes the impact of the demand for visitor-serving uses leading to the conversion of agricultural lands on lands designated RRD and lands zoned AR as well as lands designated LIA, LEA, and DA. This analysis is a broad, countywide analysis, appropriate for a program level General Plan EIR. See Master Response C (Program EIR/Level of Detail). Based upon the estimates of future tourism uses, the DEIR concluded that the loss of agricultural land would not be significant due to the availability of such large acreages of land that are afforded the opportunity for agricultural use. See also response to comment #270-08.

Response to Comment #270-12:
See response to comments #230-40 and #230-41.

Response to Comment #270-13:
Contrary to the comment, the statement in Section 4.8 (Agricultural and Timber Resources) of the DEIR is correct. It does not state that these policies would eliminate these impacts entirely or that the policies would address concentration of any and all land uses and development under Draft GP 2020. The statement merely points out that Policies AR-5g and AR-6f would reduce the cumulative impacts resulting from a concentration of visitor-serving uses within a given transportation corridor or localized area. It should be noted that the negative declaration process already requires consideration of cumulative impacts in the Initial Study (see Appendix G to CEQA Guidelines, “Mandatory Findings of Significance”).

Response to Comment #270-14:
This comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Policy AR-5g(4) is a general policy guideline for evaluating the rural character of proposed agricultural support uses. The specific issues of a proposal would be considered on a case by case basis. Detailed language implementing this policy would be incorporated into the Development Code. See Master Response C (Program EIR/Level of Detail).

Response to Comment #270-15:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Policy AR-5g exception is not mentioned in the DEIR because it would not change the significance of the impacts of Draft GP 2020 on agricultural lands.

Response to Comment #270-16:
The comment refers to Section 4.9 (Agricultural and Timber Resources) of the DEIR, specifically to Impact #4.8-3 (Agricultural Tourism). However, this section analyzes the loss of agricultural land to tourism, not the impacts of agricultural tourism land uses. The latter impacts are addressed in each of the topical sections of the DEIR. For example, the traffic impacts of tourism, and all other land uses and development under Draft GP 2020 are analyzed in Section 4.2 (Transportation). In addition, the impacts of Draft GP 2020 on traffic, farmland conversion, and other impacts without the proposed event coordination policy are addressed in the Buildout and No Project Alternatives in Section 5.0 (Alternatives) of the DEIR. See also Master Response H (Range of Alternatives).

Response to Comment #271-01:
Cumulative impacts, including water quality impacts, are addressed in Section 6.2 (Cumulative Impacts) of the DEIR. Conversion of agricultural and timber land is addressed in Section 4.8 (Agricultural and Timber Resources). The impacts of agricultural processing and support uses are specifically analyzed in Impact #4.8-2 and Impact #4.1-3. In addition, because they are among the land uses that will occur under Draft GP 2020, the impacts of agricultural processing and support uses are analyzed at a program EIR level in each of the topical sections of the DEIR. The impacts of Draft GP 2020 related to climate change are discussed in Master Response N (Climate Change). See also Master Response C (Program EIR/Level of Detail) and Master Response S (Water Supply).

Response to Comment #271-02:
The DEIR analyzes a reasonable range of alternatives in Section 5.0 (Alternatives). The Mitigated Alternative identifies policy options that would reduce the impacts of Draft GP 2020 while still meeting basic project objectives. Additional proposed mitigation measures have been presented to and considered by the Planning Commission as part of its policy making in Draft GP 2020. In addition, to the extent comments on the DEIR have identified feasible mitigation measures that effectively reduce the impacts of Draft GP 2020, they have been added to the FEIR for consideration by County decisionmakers. See also Master Response H (Range of Alternatives).

Response to Comment #271-03:
See Master Response N (Climate Change).

Response to Comment #271-04:
See Master Response N (Climate Change) and Master Response B (Jurisdiction).

Response to Comment #271-05:
Comment noted.

Response to Comment #271-06:
Comment noted. The comment pertains to Draft GP 2020 policy and not to the adequacy of the DEIR. The Draft GP 2020 includes numerous goals, objectives, and policies that would contribute to reducing water demand and increasing efficient water use and re-use. However, achieving a goal of no net increase in water use may not be physically possible. In addition, Sonoma County does not operate, maintain, or have jurisdiction over public water systems, and therefore the goal may not be attainable even if physically possible. See Master Response S (Water Supply).

Response to Comment #271-07:
Comment noted.

Response to Comment #271-08:
The DEIR addresses the impact of Draft GP 2020 land uses and development, including the impacts related to saltwater intrusion in section 4.5 (Hydrology and Water Resources) under Impact #4.5-6. The impacts of Draft GP 2020 related to climate change are discussed in Master Response N (Climate Change).

Response to Comment #271-09:
See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #271-10:
The DEIR primarily addresses the impacts of future land uses and development in the unincorporated area, and not the impacts of City development. However, the DEIR does address the cumulative impacts of Draft GP 2020 and future land uses and development of surrounding communities, including the cities within the County. Cumulative stormwater runoff is addressed in Section 6.2 (Cumulative Impacts) under "Hydrology and Water Resources". The Draft GP 2020 includes Policies WR-1a, WR-1c, and WR-1f

which address water quality issues in cooperation with cities and other entities.

Response to Comment #271-11:
See Master Response N (Climate Change).

Response to Comment #271-12:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. See also Master Response N (Climate Change).

Response to Comment #271-13:
See Master Response N (Climate Change).

Response to Comment #271-14:
Comment noted. See Master Response N (Climate Change). In addition, Draft GP 2020 includes Section 7 of the Open Space and Resource Conservation Element devoted to goals, objectives, and policies regarding energy resources.

Response to Comment #271-15:
See response to comment #239-02.

Response to Comment #271-16:
See response to comment #271-15. The comment indicates some misunderstanding of the timber conversion ordinance previously adopted by the Board in March of 2006 and of the limits of the DEIR for Draft GP 2020. The DEIR assesses at a broad programmatic level the environmental impacts of future land uses and development, including timberland conversions, that are likely to occur under Draft GP 2020. Existing regulations provide for the identification of any adverse impacts of timberland conversions to be assessed and mitigated pursuant to CEQA prior to approval of these conversions.

In order to further clarify this issue, the discussion of Timber Production/Harvesting on page #4.8-11 of the DEIR is revised as follows:

> **"According to statistics available from the State Board of Equalization, the amount of timber production carried out in the County has declined significantly since 1960, dropping from about 250 million board feet to about 14 million board feet in 2005. This reduction has been in spite of the higher prices paid for timber production. The reduction in overall production has been accompanied by the closing of several regional and local lumber mills as well as a local decline in employment in the timber industry. The reduction in County production may be attributed to a variety of factors including timber harvest cycles, lack of restocking, increasing cost of obtaining approval of timber harvest plans, and a decrease in the available timberland for harvesting.**
>
> ~~Timber production value has increased steadily in Sonoma County. In 1985, timber production value was a little over five million dollars, while by 2000; it was valued at almost $20 million. This figure reflects the increasing cost of wood products as well as the amount of harvesting that occurred.~~ In Sonoma County there are approximately 229,475 acres of timberland. The commercial timber species include Redwood, Douglas Fir, and several other conifer species; timberlands tend to be concentrated in northwestern Sonoma County where conifer and conifer/hardwood forests dominate.
>
> From 1989 through 2001, a total of 58,381 acres of timberland were approved for timber harvesting in Sonoma County, under the guidance of California Department of Forestry and Fire Protection (CDF) and the timber harvest plan (THP) review process (see discussion of State forestry regulations, below). These harvested acres are concentrated in the remote areas of the northwest part of the county. There also have been some small timber harvesting activities (less than three acres) that have been carried out in

conjunction with minor timber conversions and THP exemptions typically closer to developed areas."

In addition, the third paragraph under the discussion of zoning on page #4.8-13 of the DEIR is revised as follows:

"As of March 2002, the County had approximately 94,000 acres of timberland zoned TP. The designated TP parcels contain approximately 69,000 acres of timberland or about 30 percent of the 230,000 acres of timberland in the county. **An additional 111,000 acres are located in the RRD or RRDWA zoning districts, with the remaining 50,000 acres located in other zoning districts."**

In addition, the discussion of Timber Harvest Operations on page #4.8-14 of the DEIR is revised as follows:

"Timber Harvest Operations

Although the Forest Practice Act preempts **the County's** ~~local~~ authority to regulate **how** ~~the conduct of~~ timber operations **are conducted**, courts have **held that State law does not preclude counties from using their zoning authority to restrict the location of commercial timber operations on lands not designated TPZ.** ~~not yet determined whether the FPA precludes the County from enacting zoning regulations to govern the location of timber operations outside of designated TPZs. Because of the current state of flux in case law regarding this, it is impossible to accurately pinpoint the extent of the County's regulatory authority. A preliminary survey of existing case law, however, shows that the County may have the following authority:~~

Within TPZs The County has approximately 94,000 acres in TPZ. Of this amount, 69,000 acres are timberland. Within these areas, it is the intent of the Timberland Productivity Act (TPA) that timber operations conducted in compliance with the FPA not be restricted or prohibited due to conflict or apparent conflict with surrounding land uses. As State law preempts local regulation, the current regulatory setting does not provide the County any authority to regulate the location or the conduct of timber operations in this zone.

Outside of TPZs There are approximately 161,000 acres of timberland outside of TPZs. Within these areas, localities may be able to regulate the location of timber operations, but only to the extent that the County's regulations do not conflict with State law. ~~The courts are still weighing this issue.~~ As such, the County could not impose zoning restrictions on the hours of operation, noise, pesticide application or similar aspects timber harvest operation. However, the County may be able to require a setback for timber harvesting and / or timber yarding from residential or other existing incompatible uses. The County may also be able to disallow timber harvesting activities as permitted uses in specific zoning districts.

In addition, a fourth paragraph to the discussion of Forest Practice Rules on page #4.8-16 of the DEIR is added as follows:

"Since 1996, the State has enacted a number of new regulations for timber harvests of less than three acres; these include a requirement for the preparation of a timber harvest plan and limits on the number of these minor timber conversions. As a result, the number of minor timber harvests and/or minor timberland conversions has dropped dramatically in recent years."

In addition, a paragraph after the discussion of State regulations on page #4.8-15 is added as follows:

"Sonoma County established a permit requirement for minor timber conversions in 1996. It also adopted code language in 2006 to regulate major timberland conversions by establishing a use permit requirement and approval criteria in the TP, RRD, and RRDWA Zoning Districts."

In addition, the discussion of timberland conversion under Impact #4.8-4 on pages 4.8-28 to 4.8-30 of the DEIR is revised as follows:

"**As of 2006, timberland in the County is estimated to be approximately 230,000 acres. The actual amount that is available for commercial timber production would be somewhat less since some timberland may be in parks or owned by private landowners uninterested in timber harvesting. Increased restrictions on logging near streams and other sensitive areas within timberlands may also limit the availability of timber.**

The conversion of timberland to agricultural, residential, and other non-timber uses is permitted under both the existing General Plan as well as the zoning code. Pursuant to State law, lands designated Timber Production Zones (TPZ) are effectively protected by tax provisions and restrictions on conversion to non-timber use. While this zoning has historically protected **some of** the county's ~~conifer forests and oak woodlands~~ **timberlands**, lands designated TPZ only comprise approximately 30 percent of the county's timberlands. The vast majority of the county's timberland lies within other land use categories which **more readily** allow conversion to take place.

Historically, ~~Despite the fact that~~ less than one percent of the County's timberland has ~~historically~~ been converted to non-timber uses since the passage of the Forest Practice Act~~,~~ **in 1973. However,** there appears to be an increasing ~~pressure to convert~~ **interest in converting some timberlands** ~~these lands~~ to non-timber use**s**, primarily vineyards. As described in the setting section, nearly all **(19 out of 22)** of the **major (3-acres or more)** ~~large~~ timber conversion requests in recent years have been to accommodate vineyard development. **In addition, at the time of DEIR preparation,** ~~Through September 2004, the~~ CDF had ~~six~~ timberland conversion applications pending~~, that if approved, would result in the conversion of~~ **totaling** 369 ~~additional~~ acres ~~to vineyard~~ **and the County had one application pending totaling 1,665 acres**. **In addition, industry newsletters and land owner inquiries also give evidence of continued interest and desire to convert timberland.**

~~This recent increase in conversion requests suggests a trend that could threaten the county's timber base as these conversions effectively represent a permanent loss of timber productivity on lands on which they occur. In addition, the size of the conversion requests may be increasing. While vineyard conversions have typically ranged in size from tens to hundreds of acres, one company recently considered a vineyard conversion of approximately 5,000 acres of timberland in the coastal area.~~[53]

~~Furthermore, the true inventory of timberlands available for harvesting may actually be less than the acreage suggests because not all owners of timberland seek to log their lands. Increased restrictions on logging near streams and other sensitive areas within timberlands may further limit the availability of timber as well. Also, if new vineyard development in the coastal timberlands proves successful, the demand for high quality wine grapes would likely lead to additional conversion requests.~~[54] **However, i**~~I~~n view of this developing trend and potential for significant **timberland** loss**es** ~~of timber resources~~, the Draft GP 2020 contains goals, objectives, and policies to **reduce the amount of acreage that might otherwise be lost to timberland conversions and to** pre**s**erve, sustain, and restore timber resources for their economic, conservation, recreation, and open space values (Goal OSRC-12). Adoption and implementation of these policies would reduce the extent of adverse environmental affects associated with timberland conversions.

Policy OSRC-12e relates specifically to the conversion of timberlands to other uses on lands designated RRD. This policy **calls for the revision of** ~~would revise~~ the zoning districts which implement the RRD land use category to **reduce the potential for conversion of timberland to non-timber uses**~~prohibit uses that result in the conversion of timberlands unless the request meets certain criteria. Conversions to agricultural and other uses would be permitted provided they qualified for a timber conversion exemption pursuant to the Forest Practices Rules, provide a significant public benefit (e.g., the construction of the Sea Ranch Reservoir), or result in no net loss of timberland. Furthermore, these exceptions would not be allowed if the conversion would result in habitat fragmentation~~. **The zoning code amendments to reduce the potential timberland conversions**

were carried out in 2006 prior to the adoption of GP2020 and are part of the existing regulatory setting. This policy, **and the supporting code provisions provide greater restrictions and review requirements for conversion requests on** ~~if adopted and implemented, would give greater protection to~~ approximately 180,000 acres of the 230,000 acres of timberland in Sonoma County and would greatly reduce both the amount of conversion as well as the severity of associated impacts previously described.[55]

The adopted zoning regulations prohibit timberland conversions for agricultural cultivation on all Timber Site Classes in the TP District and on Site Class 1 and 2 in the RRD and RRDWA District. It also prohibits conversion applications for purposes of agricultural cultivation on areas with more than a fifty percent slope. These regulations also establish a use permit requirement for such proposals which may further discourage some timberland conversions while providing an opportunity to review and consider others on a case by case basis and apply approval criteria. One of the mandatory approval criteria requires that two acres of fully stocked timberland be put into permanent protective easement for every one acre converted.

Policy OSRC-12a would apply the RRD category to include all lands within a Timber Production Zone. This policy would afford the protection of zoning regulations to timberlands which includes provisions for limited number of permitted uses (e.g., single family dwellings) at densities lower than 20 acres per unit. The RRD designation prioritizes the protection of natural resources and acknowledges significant constraints to development such as the lack of infrastructure, conflicts with resource conservation, and hazards.

~~Policies OSRC-12b through 12d would implement a review and commenting process for Timber Harvest Plans (THPs). This would enable County staff to review timber harvest plans for compatibility with GP 2020 policies and comment in support of increased protection of Class III streams, and in opposition to prevent clearcutting within riparian corridors. Specifically, Policy OSRC-12d would encourage the CDF to reduce clearcutting of timber within streamside conservation areas. If approved, this policy would encourage the retention of at least 50 percent of either the overstory canopy or the understory vegetation within the riparian corridor to mitigate the impacts to streams. While the ability of County staff to regulate timber harvest plans is limited, this policy would afford some additional protection to streams and riparian corridors when THPs are considered. 53~~

These policies, if adopted and implemented, would reduce the amount of timberland that would be permanently converted to non-timber uses**. Minor amounts of timberland may also be cleared to accommodate permitted structures and related improvements, to maintain defensible space around residences in wildland fires zones.**

Given the decline in the local forest products industry for other reasons, loss of minor amounts of timberland may not have any impact on timber production. The fact that the GP policy seeks only to reduce, not prohibit conversions, also suggests that the loss of minor amounts of timberland may be acceptable. That being said, the DEIR recognizes that each individual conversion could contribute to a larger cumulative loss of timberland. However, since existing polices help preserve a timberland base by restricting the areas in which conversions can be applied, by requiring 2:1 offset of timberland preservation, and provide an incentive for additional preservation, the cumulative effect of up to 3,500 acres of conversions on the timberland base is not expected to significantly impact or deplete base of timberland available for harvesting.

As previously noted, the total amount of timberlands converted would increase to slightly less than **3000** ~~1,220~~ acres if all pending applications were approved. This amount represents approximately **one** ~~one half of one~~ percent of Sonoma County's 230,000 acres of timberland, which does not represent a significant portion of Sonoma County timberlands. Therefore, this would be a less-than-significant impact and no **additional** mitigation would be required."

Response to Comment #271-17:

See response to comment #239-07. The DEIR addresses three different policy alternatives in addition to Draft GP 2020 with respect to agricultural support uses. The No Project Alternative would continue to support these uses with limits on the location of agricultural products that are processed, resulting in more of these uses than under Draft GP 2020. The Buildout Alternative would not require the linkage to production to be as strong, resulting in more of these uses than any of the other alternatives. The Mitigated Alternative would include more restrictive limitation on support uses, resulting in less of these uses than any other alternative. The impacts of these alternatives can be compared in Section 5.0 (Alternatives) in Exhibit #5.0-2 under each of the topical sections. Since agricultural processing is essential to the continuing viability of agriculture, there is no alternative that is analyzed that would prohibit these uses in agricultural areas. See also Master Response J (Buildout)

Response to Comment #271-18:
The Mitigated Alternative in Section 5.0 (Alternatives) of the DEIR analyzes the impacts of Draft GP 2020 assuming that a higher percentage (75%) of local product is required.

Response to Comment #271-19:
The impacts of Draft GP 2020 on growth and concentration of population is analyzed in Section 4.1 (Land Use, Population, and Housing) of the DEIR. Under Impact #4.1-1, the DEIR concludes that the impact of accommodating housing and other development in existing urban communities with sewer and water services does not constitute sprawl. This is based upon the well-founded planning principle, supported in Draft GP 2020, of concentrating urban development in infill locations with services rather than in outlying rural areas.

In addition, the use of agreements with the cities that would involve trading urban development for open space has been tried in the past in Sonoma County, but has not been successful due to the reluctance of cities to accept the legal responsibility for state-mandated housing allocations that exceed their ability to provide services and infrastructure. Without city agreement, such a program is not feasible. See also response to comment #266-72.

Response to Comment #271-20:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 Circulation and Transit Element includes Section 3 containing the proposed policies to promote and coordinate transit service; in addition, Circulation and Transit Element Section 3 and Open Space and Resource Conservation Element Section 9.2 include relevant policies that promote non-automobile transportation modes. See also Master Response I (Land Use Changes).

Response to Comment #272-01:
Comment noted. See Master Response N (Climate Change)

Response to Comment #272-02:
Comment noted. See Master Response N (Climate Change)

Response to Comment #272-03:
See Master Response N (Climate Change).

Response to Comment #272-04:
Cumulative impacts are analyzed in the DEIR in Section 6.2 (Cumulative Impacts). See Master Response N (Climate Change).

Response to Comment #272-05:
See Master Response N (Climate Change).

Response to Comment #272-06:
See Master Response N (Climate Change)

Response to Comment #272-07:

Contrary to the comment, the DEIR provides an evaluation of an alternative that reduces the impacts of the proposed project, the Mitigated Alternative analyzed in Section 5.0 (Alternatives). See also Master Response H (Range of Alternatives) and Master Response N (Climate Change).

Response to Comment #272-08:
See Master Response N (Climate Change).

Response to Comment #272-09:
The Draft GP 2020 Open Space and Resource Conservation Element includes Section 7.1 that provides a goal, objectives, and policies for energy conservation and demand reduction, including Policy OSRC-14d in order to promote energy efficiency above State standards. See also Master Response N (Climate Change).

Response to Comment #272-10:
Draft GP 2020 includes policies that accomplish all of these purposes. For example, Objective OSRC-2.6 calls for using circulation and transit facilities more efficiently. Other Draft GP 2020 policies in the Circulation and Transit, Land Use, and Open Space and Resource Conservation Elements call for increasing transit and other non-automobile modes of transportation, reducing energy demand, control of sprawl, and support for mixed use development. See also Master Response N (Climate Change).

Response to Comment #272-11:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. See also Master Response N (Climate Change).

Response to Comment #272-12:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. See Master Response N (Climate Change).

Response to Comment #272-13:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. See also Master Response N (Climate Change).

Response to Comment #272-14:
Section 3.4 of the Draft GP 2020 Water Resources Element calls for substantial water conservation efforts in the unincorporated area. See also Master Response N (Climate Change).

Response to Comment #273-01:
Riparian Corridor policies allow for necessary fire, flood, and other streamside management needs as well as other uses within the streamside conservation areas. Accordingly, the type of neglect described in the comment that would lead to secondary environmental impacts is not anticipated. The details of these policies will be included in the codes that are adopted to implement the policies.

Response to Comment #273-02:
CEQA does not require analysis of economic and social impacts, unless such impacts lead directly to physical impacts on the environment. Economic factors are considered in the policy decisions made as part of Draft GP 2020.

Response to Comment #273-03:
As noted on DEIR page #4.6-31, the protection of riparian corridors serves as a mitigation to preserve a sensitive natural community type of particular concern in Sonoma County.

Response to Comment #273-04:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR.

Response to Comment #274-01:

Flood protection planning is being carried out as part of the Draft GP 2020 Public Safety Element in concert with the applicable agencies pursuant to such policies as PS-2d, PS-2g, and PS-2h. See also Master Response N (Climate Change).

Response to Comment #274-02:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Protection of all USGS streams is provided in the Draft GP 2020 Open Space and Resource Conservation Element.

Response to Comment #274-03:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR.

Response to Comment #274-04:
See response to comment #218-51.

Response to Comment #274-05:
The comment is noted and the difference in the name of the reach is acknowledged. However, both statements in the DEIR are accurate regardless of the name of the reach. In addition, the DEIR text as written does not raise any confusion or difficulty in understanding the impacts of the Draft GP 2020.

Response to Comment #274-06:
Comment noted. However, in the context of water quality and water resource issues, it is preferable from a County General Plan perspective to follow the standard regulatory boundaries utilized by the Regional Water Quality Control Boards in the Basin Plans.

Response to Comment #274-07:
See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #274-08:
The comment is correct, that coho salmon is now federally listed as endangered. As indicated on page #4.6-5 of the DEIR, Exhibit #4.6-4 provides a list of special status animal and plant species reported in Sonoma County that are monitored by the California Natural Diversity Data Base. This is not intended to be an exhaustive list, and the DEIR acknowledges that other special-status species are known or suspected to occur in Sonoma County that are not monitored by the CNDDB. This includes Chinook salmon and other species.

In response to comment #4-02, Exhibit #4.6-4 has been revised to include additional species.

In addition, the first full paragraph on page #4.6-5 of the DEIR is revised as follows:

> ”Exhibit #4.6-4 provides a list of the 42 animal species and 86 plant species reported from Sonoma County that are monitored by the CNDDB, **together with a number of other special status species known from Sonoma County.**

Response to Comment #274-09:
As indicated in the response to comment #274-08, Exhibit #4.6-4 provides a list of special status animal and plant species reported in Sonoma County that are monitored by the CNDDB and is not intended to be an exhaustive list. Exhibit #4.6-4 has been revised as shown in response to comment #4-02.

Response to Comment #275-01:
The comment letter dated 2/22/06 pertains to policy issues and not the adequacy of the DEIR. Regarding the comment in the attached letter of 7/7/04, most of the species identified by the comment would be expected to occur in the remaining natural grasslands, savanna, woodlands and scrub, and seasonal wetlands and marshlands of the West Petaluma vicinity. Exhibit #4.6-4 of the DEIR consists of a table of special-status species reported to occur in Sonoma County that are monitored by the California Natural Diversity Data Base (CNDDB). As indicated on page #4.6-5 of the DEIR, this is not intended to be an

exhaustive list, and the DEIR acknowledges that other special status species are known or suspected to occur in Sonoma County that are not monitored by the CNDDB. See also revision to Exhibit #4.6-4 in response to comment #4-02.

Response to Comment #276-01:
See response to comment #230-04.

Response to Comment #276-02:
See response to comment #230-05 and #230-07.

Response to Comment #276-03:
See response to comment #230-08.

Response to Comment #276-04:
See response to comment #230-10.

Response to Comment #276-05:
See response to comment # 230-11.

Response to Comment #276-06:
See response to comment #230-12.

Response to Comment #276-07:
See response to comment # 230-14.

Response to Comment #276-08:
See response to comment #230-15.

Response to Comment #276-09:
See response to comment #230-16.

Response to Comment #276-10:
See response to comment #230-18.

Response to Comment #276-11:
See response to comment #230-19.

Response to Comment #276-12:
See response to comment #230-20.

Response to Comment #276-13:
See response to comment #230-21.

Response to Comment #276-14:
See response to comment # 230-22

Response to Comment #276-15:
See response to comment # 230-23.

Response to Comment #276-16:
See response to comment #230-24.

Response to Comment #276-17:
See response to comment #230-25.

Response to Comment #276-18:

See response to comment #230-26.

Response to Comment #276-19:
See response to comment #230-27.

Response to Comment #276-20:
See response to comment #224-04 and #230-28.

Response to Comment #276-21:
See response to comment #230-19. Since the Draft GP 2020 and existing County noise regulations are sufficient to reduce Impact #4.4-4 to a less than significant level, the addition of Area Plan standards to accomplish the same purpose is not necessary. Noise impacts resulting from uses requiring a use permit are addressed as part of the review of the project.

Response to Comment #276-22:
See response to comment #230-30.

Response to Comment #276-23:
See response to comment #230-31.

Response to Comment #276-24:
See response to comment #230-32.

Response to Comment #276-25:
See response to comment #230-33.

Response to Comment #276-26:
See response to comment #230-34

Response to Comment #276-27:
See response to comment #230-34.

Response to Comment #276-28:
See response to comment #230-35.

Response to Comment #276-29:
See response to comment #230-36 and #230-37.

Response to Comment #277-01:
Baseline traffic information is provided in Section 4.2 (Transportation) of the DEIR. Baseline data for noise and water availability are included in Sections 4.4 (Noise), 4.5 (hydrology and Water Resources), and 4.9 (public Services) of the DEIR. The level of detail of these analyses is appropriate for a Program EIR for a countywide General Plan. See also, Master Response C (Program EIR/Level of Detail).

Response to Comment #277-02:
The comment focuses on Section 4.8 (Agricultural and Timber Resources) of the DEIR, which is the section that addresses the impact of Draft GP 2020 on agricultural land and timberlands. However, the impact of agricultural uses such as wineries is also included in the other topical sections of the impact analyses. Such agricultural processing facilities are among the land uses and development allowed by Draft GP 2020 that are addressed in each of the topical sections of the DEIR. Specifically, impacts on water resources are addressed in Sections 4.5 (Hydrology and Water Resources) and 4.9 (Public Services); impacts on visual resources in Section 4.11 (Visual Resources); noise impacts in Section 4.4 (Noise); public safety impacts in Sections 4.5 (Hydrology and Water Resources), 4.7 (Geology/Soils), 4.9 (Public Services) and 4.13 (Hazardous Materials); and circulation impacts in Section 4.2 (Transportation). Conflicts between non-agricultural uses and agricultural uses are addressed in Section 4.1 (Land Use,

Population, and Housing).

Response to Comment #277-03:
The DEIR does assume that Draft GP 2020 will be fully implemented as proposed. However, the DEIR does not state that all impacts will be reduced to a less than significant level. Contrary to the comment, the DEIR includes wineries and other uses in the traffic studies, water demand, and other impacts at a program level of detail. The DEIR uses projected growth in wineries in its assessment of impacts in the other topical areas of analysis. Such is the case, for example, in the traffic analysis in Section 4.2, the noise analysis in Section 4.4, and the water demand analysis in Section 4.9. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #277-04:
Comment noted. As noted in the response to comment #277-03, Impacts #4.8-2 and #4.8-3 of the DEIR are limited to addressing the impacts of Draft GP 2020 on agricultural lands from agricultural processing and agricultural tourism. The analyses of the impacts of tourism and processing uses on traffic, noise, water resources, etc., are included in the other topical sections of the DEIR.

Response to Comment #278-01:
See response to comment #277-01.

Response to Comment #278-02:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR.

Response to Comment #278-03:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR.

Response to Comment #278-04:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR.

Response to Comment #279-01:
See Master Response K (Agricultural Traffic).

Response to Comment #279-02:
Comment noted. See Master Response K (Agricultural Traffic).

Response to Comment #279-03:
The impacts of the existing River Rock Casino are part of existing conditions and are not an impact of Draft GP 2020. In addition, the Graton Rancheria Hotel and Casino is one of the cumulative projects identified and considered in Section 6.2 (cumulative Impacts) of the DEIR, since it is not a land use that is proposed by Draft GP 2020. Agricultural tourism under Draft GP 2020 is not “unbridled and unregulated” as these uses require discretionary permits and are subject to limiting policies in the Draft GP 2020 Agricultural Resources Element. Traffic impacts of all uses permitted and likely to occur under Draft GP 2020 have been analyzed in Section 4.2 (Transportation) of the DEIR. See also response to comment #220-02 and Master Response K (Agricultural Traffic).

Response to Comment #279-04:
The Draft GP 2020 standards for roadway noise utilize the most appropriate standard for minimizing the impacts of traffic noise throughout the 24 hour day. These standards are more restrictive during nighttime hours, reflecting the need to maintain quieter noise environments during these periods. In addition, agricultural traffic is more likely to occur during daylight or early evening hours. See also response to comment #224-05 and #224-06 and Master Response K (Agricultural Traffic).

Response to Comment #279-05:
The comment is incorrect. The policy statement that would carry out Objective AR-6.3 is Policy AR-6d. In addition, Program 7 has been added to the Draft GP 2020 Agricultural Resources Element to carry out this policy. This would provide for development of an event coordination program. As such, it is included

in the DEIR analysis.

Response to Comment #279-06:
See response to comment #279-03.

Response to Comment #280-01:
The DEIR language in question is based on the California Department of Conservation's Farmland Conversion Report from 2000-2002. The data contained within the report does not differentiate between city and county farmland, nor does it give specific acreage for reclassification. The analysis on page #4.8-4 of the DEIR provides a clear analysis of how it is possible to have a net increase of agricultural land, despite Exhibit #4.8-2. As a result, the DEIR's conclusion that this impact is less than significant is reasonable. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #280-02:
See response to comment #280-01.

Response to Comment #280-03:
See response to comment #280-01.

Response to Comment #280-04:
The DEIR is correct in stating the FFMP mapping issue of including both city and county land. The discussion following this statement on page #4.8-18 provides the additional ways in which the conversion of agricultural land could occur. See response to comment #280-01.

Response to Comment #280-05:
See response to comment #266-59.

Response to Comment #280-06:
Agricultural processing and support uses are analyzed in the DEIR under Impact #4.8-2. The DEIR recognizes the substantial increase in processing and support uses, especially wineries, that has occurred in the County and estimates the likely trend in the future under Draft GP 2020, based on County staff's consultations with representatives from the agricultural industry (see DEIR, page #4.8-22 and response to comment #219-08). A detailed analysis of why this trend has occurred is outside the scope of a Program EIR prepared for a countywide General Plan. See Master Response C (Program EIR/Level of Detail). The Agricultural Resources Element of Draft GP 2020 includes Sections 2.5 and 2.6 which establish policy for the location and intensity of agricultural support and visitor serving uses.

Response to Comment #280-07:
The language in question stems from Draft GP 2020 Agricultural Resource Element policies which use the phrase "in the local area". The Draft GP 2020 glossary defines "Local Area" as "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." The specific local area applicable to a particular processing use application would be determined as part of the review of the project.

Response to Comment #280-08:
The DEIR provides a reference for the information in Footnote #20 at the bottom of page #4.8-7. The information comes from a study conducted by PRMD staff for the CAC during its review of Agricultural Processing issues. The study compared the processing capacity of Sonoma County wineries with the County vineyard production over time. It concluded that the portion of importation has remained relatively stable.

Response to Comment #280-09:
See response to comment #260-06. The DEIR acknowledges that the major processing uses in the County are likely to continue to be wineries. The impacts of all Draft GP 2020 land uses and development, including processing uses, are addressed in each of the topical sections of the DEIR at a level of detail commensurate with a program EIR for a countywide General Plan. See Master Response

C (Program EIR/Level of Detail).

Response to Comment #280-10:
See response to comment #280-09. The DEIR's analysis of agricultural tourism as a whole is appropriate for a program EIR for a countywide General Plan. See also Master Response C (Program EIR/Level of Detail).

Response to Comment #280-11:
As stated in the comment, the DEIR does identify "escalating property values" as a factor when addressing agricultural issues. CEQA does not require a fiscal analysis of impacts to property value. The suggestion that increasing tourism activities could lead to greater conversion of agricultural lands to other uses is discussed under impact #4.8-3, which notes that concentration of visitor serving uses could threaten the long term viability of agriculture. The DEIR concludes this impact will be less than significant given the policy protections for agriculture in Draft GP 2020.

Response to Comment #280-12:
See responses to comment #251-08, #279-04, and comment letter #220 and Master Response P (Agricultural Traffic). The noise impacts of all Draft GP 2020 land uses and development, including noise associated with events at wineries, are addressed in Section 4.4 (Noise) of the DEIR under Impact #4.4-4 (Impact to Noise Sensitive Development from Stationary Noise Sources).

Response to Comment #280-13:
As noted on the referenced page, conflicts such as these are analyzed under Impact #4.1-2 of the DEIR. The DEIR does not distinguish the basis for the conflict; rather it notes that conflicts may be caused by any one of a number of issues, depending upon the location and the nature of the use.

Response to Comment #280-14:
As stated on page #4.8-24 "it would be reasonable to expect that the actual amount of agricultural land lost to this type of development would be higher as these projections only account for support uses and do not account for related access roads and parking lots that would be constructed." The Exhibit projects the increase in wineries will convert approximately 174 acres. Even if the acreage is doubled, Sonoma County contains over 800,000 acres of available agricultural land. Therefore a less than significant impact conclusion is appropriate.

Response to Comment #280-15:
Although there were additional wineries constructed from 2000 to 2004, there have been very few since, reflecting the changing economic cycles of the agricultural industry. The planting of vineyards and construction of wineries occurs in cycles that ebb and flow over the long term. Since wine grape planting and winery demand were projected based upon a long term trend and with advice from knowledgeable members of the agricultural industry, the addition of the 2000-2004 cycle would not change the 2020 forecast utilized in the DEIR. See response to comment #280-08.

Response to Comment #280-16:
The DEIR addresses the impacts of land uses and development under proposed Draft GP 2020 policies. Policy AR-5a expresses the policy that agricultural processing and support uses be proportional to local production. The details of the policy would be addressed in the update of the Development Code. See Master Response C (Program EIR/Level of Detail).

Response to Comment #280-17:
As noted in response to comment # 280-16, the detailed standards for agricultural processing would be established in the Development Code. The DEIR assumes that agricultural support uses will increase in the future compared to existing conditions; a comparison to existing conditions is the appropriate basis for determining the significance of Draft GP 2020 impacts, as required by CEQA. A comparison between the impacts of the No Project Alternative and Draft GP 2020 is included in Section 5.0 (Alternatives) of the DEIR.

Response to Comment #280-18:
See responses to comments #280-16 and #280-17.

Response to Comment #280-19:
Contrary to the comment, the DEIR adequately identifies and analyzes the types of visitor serving uses allowed in agricultural areas under Impact #4.8-3. Policy AR-6a actually lists the types of uses. The DEIR's statement that Policy AR-6a reduces the conversion of agricultural land related to these uses is accurate. Without such restriction, there would be no limits on tourism uses in agricultural areas.

Response to Comment #280-20:
Contrary to the comment, the DEIR does not conclude that allowing agricultural tourism on agricultural lands will "ensure that these activities do not become pervasive…". As noted on page #4.8-28, the Draft GP 2020 policies "do much to reduce this impact". Such policies include Goal AR-6, Objectives AR-6.1, AR-6.2, and AR-6.3, and Policies AR-6a through AR-6h.

The gist of these policies is to encourage value-added visitor serving uses that benefit agricultural production, thereby enabling this production to remain a viable economic activity. By keeping agriculture viable, the pressure for urban sprawl and rural residential encroachment is reduced, open space is maintained, and employment opportunities are enhanced both on the farm and in related businesses in urban areas.

However, these policies also recognize the comment's point that these uses have the potential to expand to become the central economic activity on agricultural lands, to the detriment of production. Should this increase over time, it could undermine the viability of the County's agricultural base. For this reason, the policies place limits on visitor serving uses. Recreational uses are limited, restaurants and lodging are prohibited, special events are only allowed where incidental to production, and concentrations of all visitor serving and recreation as well as support uses are limited.

Visitor-serving uses are among the uses that will occur under Draft GP 2020. The DEIR analyzes the traffic, noise, sewer, and water impacts of all of these future uses at a countywide, programmatic level in each relevant impact discussion in Chapter 4. See Master Response C (Program EIR/Level of Detail).

Response to Comment #281-01:
See response to comment #249-10.

Response to Comment #281-02:
Comment noted. Decisions regarding proposed development in the City of Rohnert Park are not under the jurisdiction of Sonoma County. In addition, annexation of the areas identified in the comment is subject to approval of the Sonoma County Local Agency Formation Commission (LAFCO), not Sonoma County. In any case, the impacts of urban development in this area will be addressed by the lead agency, the City of Rohnert Park.

The Draft GP 2020 DEIR, however, considers such future development by the cities in its analysis in several topical areas. For example, traffic impacts are identified in Section 4.2 (Transportation). Groundwater and flooding impacts are identified in Section 4.5 (Hydrology and Water Resources). Cumulative impacts of combined city and county growth are identified in Section 6.2 (Cumulative Impacts).

Response to Comment #281-03:
As noted in the response to comment #281-02, decisions regarding annexation are the responsibility of LAFCO. As a result, Sonoma County does not have the authority to impose a moratorium on future annexations.

Response to Comment #281-04:
See response to comment #249-10. As part of the EIS review of the project, the federal government will address the site specific flooding and endangered species issues in detail.

Response to Comment #282-01:
The DEIR identifies known existing flooding problems in Sonoma County watersheds and subbasins on pages #4.5-1 through #4.5-16 and in Exhibit #4.5-2. The DEIR analyzes the effects of the Draft GP 2020 with respect to flood hazards in Impacts #4.5-9, #4.5-10, #4.5-11, and #4.5-12 Failure of Levee or Dam.

Response to Comment #282-02:
Comment noted. Although some land subsidence due to excessive groundwater withdrawal has been reported by several community interest groups concerned about groundwater levels in the Rohnert Park area, the Final EIR for the Canon Manor West Subdivision Assessment District concluded that, notwithstanding historical groundwater declines in the south Santa Rosa Plain, "data documenting subsidence in the Santa Rosa Plain are lacking, indicating that the groundwater declines have not been sufficient to cause significant subsidence." (Final EIR, January 2005, p. 16-182.) The DEIR authors are unaware of any mass land subsidence on footslopes or fans of Sonoma Mountain, whether associated with groundwater withdrawals or other causes. Recent detailed surveys of several of the creek channels in the Rohnert Park area, associated with channel maintenance or de-silting project, did not discover unusual subsidence in this area.

Response to Comment #282-03:
Comment noted. This comment pertains to a policy issue and not to the adequacy of the DEIR. The DEIR analyzes the cumulative impacts of city and county growth on resources such as water in Section 6.2 (Cumulative Impacts).

Response to Comment #282-04:
The DEIR analyzes the adequacy of future water supplies in Section 4.9 (Public Services), including the availability of water from the SCWA Water Project. See also Master Response S (Water Supply).

Response to Comment #282-05:
See response to comments #228-42 and #281-04.

Response to Comment #283-01:
The comment's specific concerns regarding the adequacy of the DEIR are stated in subsequent comments and are addressed in responses to those comments. See also Master Response G (Recirculation).

Response to Comment #283-02:
The DEIR includes an analysis of buildout of the land use maps in Section 5.0 (Alternatives) under the Buildout Alternative. In effect, this analysis identifies the impacts of Draft GP 2020 beyond year 2020 because it analyzes impacts of development associated with land uses and development greater than projected to occur within the 2020 timeframe. Since the Draft GP 2020 is based upon projected growth by year 2020, growth beyond that time frame is not part of the project and is therefore not required in the project analysis. Growth beyond year 2020 would be the subject of environmental review when the GP 2020 is updated in the future. See also Master Response H (Range of Alternatives). It should also be noted that, historically, General Plan horizons typically do not extend beyond 15-20 years.

Response to Comment #283-03:
The comment is incorrect. Analysis of the Buildout Alternative provides an assessment of GP 2020 impacts based upon full development allowed by the Draft GP 2020 land use maps, regardless whether or not that development occurs before or after year 2020. See also response to comment #283-02 and Master Response J (Buildout).

Response to Comment #283-04:
See response to comment #283-02 and #283-03. The comment has failed to identify why the DEIR's analysis based on a year 2020 projection, combined with the analysis of full buildout under the Buildout Alternative, falls short of the requirements of CEQA.

Response to Comment #283-05:
See Master Response E (Extent of Significant Impacts) and Master Response F (Explanation for Lack of Mitigation Measures).

Response to Comment #283-06:
CEQA does not require that the Summary of Findings include a summary of the impacts of the alternatives. Instead, the comparison of the impacts of the alternatives is provided in Section 5.0 (Alternatives), specifically in Exhibit #5.0-2. This exhibit allows the reader to quickly and easily compare the relative merits of each alternative from the standpoint of environmental impacts.

Response to Comment #283-07:
Section 7.3 (Bibliography) lists all the materials referenced to prepare the DEIR. The reports referenced by the comment were not independently prepared, as the comment asserts. Rather, they were authored by consultants who are members of the EIR team, were hired by the County, and worked with the County to prepare materials specifically for use in the DEIR, as provided in CEQA. The authors collaborated with PRMD staff in the preparation of the DEIR.

Response to Comment #283-08:
Contrary to the comment, the DEIR includes an analysis of the impacts of city growth on the unincorporated area. Section 4.1 (Land Use, Population, and Housing), under Impact #4.1-1, describes the potential for growth of the cities and the unincorporated County area, then explains that the growth in the unincorporated area is limited not only by concentration of growth within designated Urban Service Areas of the County, but also by containing city growth within City Urban Growth Boundaries.

The DEIR then goes even further by examining the cumulative impacts of land uses and development under City General Plans and Draft GP 2020 in Section 6.2 (Cumulative Impacts), which states: "In addition to impacts that are cumulatively significant under Draft GP 2020, there is an additional level of cumulative impact resulting from growth in the unincorporated portion of Sonoma County, together with the projected growth of each of the nine cities." The environmental impacts of this combined county and city growth are then analyzed at a programmatic level in the individual impact areas in the remainder of Section 6.2.

Response to Comment #283-09:
Contrary to the comment, there is no flaw that needs to be corrected. First, there are very few expansions of the Urban Service Areas (USAs) proposed in Draft GP 2020. As explained on DEIR pages #4.1-23 and #4.1-24, these few expansions are primarily intended to recognize parcels that are already built upon and included within the applicable sewer districts or voter approved City Urban Growth Boundaries. Thus, most of the impacts from development within these USAs have already occurred. To the extent additional development within the USAs is projected to occur under Draft GP 2020, the DEIR addresses these impacts as part of the future land uses and development under Draft GP 2020 in each of the topical sections in Chapter 4. This is explained on pages #4.1-30 and #4.1-31 of the DEIR. The relevant sections include Section 4.4 (Noise), Section 4.5 (Hydrology and Water Resources), Section 4.6 (Biological Resources), and Section 4.9 (Public Services).

Response to Comment #283-10:
The comment refers to the discussion on DEIR pages #4.1-36 through #4.1-39, which is Impact #4.1-2. This impact discussion analyzes only the potential for land use conflicts between agricultural and residential/urban uses. The impacts of Draft GP 2020 land uses and development, including gravel mining and urban growth, have been analyzed in each of the topical sections of the DEIR at a programmatic level appropriate for a General Plan EIR. The impacts of Draft GP 2020 land uses and development on agricultural resources are analyzed in Section 4.8 (Agricultural and Timber Resources). The impacts of Draft GP 2020 land uses and development on biological resources are analyzed in Section 4.6 (Biological Resources).

Response to Comment #283-11:
Impact #4.8-1 was found to be less than significant based upon the amount of available agricultural land

coupled with proposed Draft GP 2020 polices. In addition to support for marketing, Draft GP 2020 includes other policies that will help protect agriculture, including preservation of urban service boundaries, encouragement for agricultural support and visitor serving uses, low residential densities in rural areas, and phasing out of terrace gravel mining in the Middle Reach of the Russian River.

Response to Comment #283-12:
The comment refers to one of many policies that are intended to preserve agriculture and that are relied upon for the DEIR's conclusion that Impact #4.8-1 will be less than significant. See also response to comment #283-11 and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #283-13:
Contrary to the comment, the DEIR analyzes the impacts of all land uses and development under Draft GP 2020 on biological resources in Section 4.6 (Biological Resources). The text cited in the comment is intended only to analyze the impacts of land use conflicts between agricultural and residential/urban uses.

Response to Comment #283-14:
See Master Response N (Climate Change).

Response to Comment #283-15:
Contrary to the comment, the DEIR addresses at a programmatic level all the impacts of projected growth anticipated under Draft GP 2020, including the full range of public services and infrastructure necessary to serve that growth. The impacts of Draft GP 2020 on fish and wildlife are addressed in Section 4.6 (Biological Resources). The impacts of Draft GP 2020 on groundwater are addressed in Section 4.5 (Hydrology and Water Resources). See also Master Response Q (SCWA Water Project) and Master Response S (Water Supply).

Response to Comment #283-16:
Section 4.9 (Public Services) of the DEIR, under Water Supply Services, provides a description of the existing environmental setting of the Sonoma County Water Agency's Water Project, which provides water to meet the demands of a number of retail water providers in Sonoma and Marin Counties. The impacts of the Agency's Water Project, and the flood control and diversion operations associated with the existing water supply system, are being addressed by the Agency in consultation with other responsible agencies that are not under the jurisdiction of the County of Sonoma. The impacts of the existing diversions from the Eel River will continue regardless of whether Draft GP 2020 is adopted and implemented. See also response to comment #252-13, Master Response Q (SCWA Water Project), and Master Response S (Water Supply).

Response to Comment #283-17:
See Master Response H (Listing of Impaired Water Bodies). The implications of these impairments are discussed in Section 4.5 (Hydrology and Water Resources) of the DEIR under impacts #4.5-1 through #4.5-4.

Response to Comment #283-18:
The impacts of future growth on water supplies under Draft GP 2020 are addressed in Section 4.9 (Public Services) of the DEIR. The impacts of development of facilities necessary to serve this growth are also identified in this section as well as in each of the topical sections of Section 4. The impacts of all land uses and development under Draft GP 2020 on endangered species and water quality are addressed in Section 4.6 (Biological Resources) and Section 4.5 (Hydrology and Water Resources) respectively. See also response to comment #283-16.

Response to Comment #283-19:
The comment misstates the conclusions of the DEIR regarding water quality impacts. Impact #4.5-1 referred to in the comment addresses only water quality impacts from residential, commercial, industrial, and public uses. The DEIR concludes that these impacts would be less than significant due to numerous existing regulations and proposed policies and programs in Draft GP 2020. Policy WR-1j (Now WR-1k) is

only one of these proposed policies. On the other hand, the DEIR concludes under Impact #4.5-3 that water quality impacts from agricultural and resource uses would continue to be significant and unavoidable notwithstanding existing regulations and proposed policies, in part because agricultural uses are generally not subject to discretionary permits and environmental review. See also response to comment #4-14.

Response to Comment #283-20:
Comment noted. However, the DEIR's rationale for the conclusion is reasonable, particularly in light of the limited future development projected in Bodega Bay. See also response to comment #237-91.

Response to Comment #283-21:
Contrary to the comment, the conclusion that water quality impacts identified under Impact #4.5-1 will be less than significant is due to both existing regulations, as described earlier in Section 4.5 (Hydrology and Water Resources), and proposed policies in Draft GP 2020. While some of the proposed policies rely upon future programs, others are more specific and would be implemented immediately upon adoption of GP 2020. All of the mitigating policies included in the Draft GP 2020 are realistic and feasible, even if they may take some time to accomplish. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #283-22:
The DEIR's range of alternatives represents a reasonable range of alternatives to the proposed project, given the Project Objectives set forth in Section 3.2 (Project Objectives and History) of the DEIR. Contrary to the comment, Section 5.0 (Alternatives) of the DEIR identifies the impacts of these alternatives and compares them to the existing environmental setting as well as to the proposed project. See also Master Response H (Range of Alternatives).

Response to Comment #283-23:
The comment's characterization of growth in the unincorporated County as "rapid urbanization" is completely unsubstantiated by any evidence and contrary to recent U.S. Census, State Department of Finance, Association of Bay Area Government, or Sonoma County data. The Draft GP 2020 update is a policy review that proposes only limited changes to Land Use designations and Zoning, as described in Section 3.2 (Project Objectives and History) of the DEIR. As described on page #3.0-9, the Board of Supervisors' decision to limit the update to a policy review reflected widespread sentiment among the community at large that the existing general plan land use maps, which direct growth to urban areas, has served the County well. See also Master Response H (Range of Alternatives) and Master Response I (Land Use Changes). The DEIR thus included a reasonable range of alternatives to the actual, policy review project at issue.

Response to Comment #283-24:
As noted in response to comment #283-23, the alternatives reflect a wide range of policy options in keeping with the purpose of the project to conduct a policy review of the General Plan. In fact, many of the impacts differ among the alternatives, suggesting that the alternatives do, in fact, provide options that make a difference.

Response to Comment #283-25:
Contrary to the comment, Draft GP 2020 and its implementing policies and ordinances include conservation programs (Open Space and Resource Conservation Element), urban infill (Housing Element), and use of recycled materials (ARM Plan), all of which are reasonable and feasible mitigation measures. In each case where the DEIR concludes that an impact is significant and unavoidable, it explains the reasons for that conclusion. See also Master Response F (Explanation for Lack of Mitigation Measures) and Master Response E (Extent of Significant Impacts).

Response to Comment #283-26:
The DEIR discusses the potential impacts of land uses and development consistent with the Draft GP 2020 on special status species under Impact #4.6-1, beginning on page #4.6-26 of the DEIR. The special status species listed in Exhibit #4.6-4 of the DEIR are generally limited to those species monitored by the

California Natural Diversity Data Base, and the DEIR acknowledges that other special-status species are known or suspected to occur in Sonoma County. However, State and Federally listed species known or suspected to occur in Sonoma County have been identified in the revised Exhibit #4.6-4 provided in response to comments #4-02 and #274-08. These species represent the greatest potential constraint to future development and are generally considered the most vulnerable given their official listing status. Numerous other information sources were used in preparing the Sonoma County General Plan Update, as described in the Biological and Wetland Resources Background Report.[7]

Response to Comment #283-27:
Contrary to the comment, the DEIR analyzes the impacts of future development and uses under Draft GP 2020 on habitat in Impacts #4.6-1 through #4.6-4; this analysis is at a programmatic level appropriate for a General Plan EIR. Draft GP 2020 Policy OSRC-7b requires a site assessment and adequate mitigation for discretionary projects, which would include consideration of potential impacts of development on sensitive resources. Policy OSRC-7i calls for conduct of a comprehensive habitat identification and mapping program for use in future policy considerations. The DEIR acknowledges that biological resources may be impacted by land uses that occur outside of the County's discretionary permit process, which is why the DEIR concludes that impacts on habitat would be significant and unavoidable (see conclusion under Impacts #4.6-1 and #4.6-2).

Response to Comment #283-28:
The DEIR discloses and analyzes the impacts of traffic generated by all of the jurisdictions in Sonoma County and the traffic into and out of the borders of the County in Section 4.2 (Transportation). The impacts are addressed by policy mitigation measures identified in that section. Contrary to the comment, CEQA requires the lead agency to mitigate the impacts of the proposed project, which in this case is the development and uses likely to occur under Draft GP 2020. See Master Response B (Jurisdiction).

Response to Comment #283-29:
The comment is unclear how increased traffic would result in impacts to visual resources on State Scenic Highways and County Scenic Corridors. Visual resource impacts are addressed in Section 4.11 (Visual Resources) of the DEIR. Traffic congestion impacts are addressed in Section 4.2 (Transportation. Mitigation measures are offered in several sections of the Draft GP 2020 Circulation and Transit Element. The DEIR explains why some of the mitigation measures may not be feasible. For example, Page #4.2-36 explains that some road improvements may not be feasible due to the lack of funding, public opposition, and project impacts.

Response to Comment #283-30:
The DEIR acknowledges that many transit decisions are made by other agencies and that lack of funding could affect the ability of transit operators to provide services. Nevertheless, since transit services continually operate below capacity and the automobile remains the preferred mode of transportation, the DEIR conclusion that the impact is less than significant seems reasonable.

Response to Comment #283-31:
The comment misstates the DEIR, which addresses the specific topic of traffic in the cities. The DEIR states on page #4.2-40 that without additional study, it is not possible to determine the degree to which future congestion on city and county roadways would be due to development in the cities or in the County. To the extent development in the County causes an impact on city roadways, payment by the County of a "fair share" contribution in the form of a regional traffic mitigation fee would an appropriate mitigation. Draft GP 2020 includes Section 6 of the Circulation and Transit Element, which provides the policy framework for the County to work with the cities to develop a regional traffic mitigation fee. A detailed study to determine the relative contribution of city and county traffic to a congested area depends upon detailed land use and traffic data focused upon the area being considered in the study, which is beyond the scope of a General Plan Program EIR.

[7] Environmental Collaborative and Nichols-Berman, *Sonoma County General Plan Update, Biological and Wetland Resources Background Report,* 31 July 2002.

Response to Comment #283-32:
See Master Response P (Urban Water Management Plans), and Master Response Q (SCWA Water Project), and Master Response S (Water Supply).

Response to Comment #283-33:
Contrary to the comment, the DEIR does not assume that adequate surface water supplies will become available to support urban growth. In fact, Section 4.9 (Public Services) of the DEIR concludes under Impact #4-9.1 that available water supplies would not suffice to serve all of the unincorporated Urban Service Areas, a significant and unavoidable impact. See also Master Response P (Urban Water Management Plans), Master Response Q (SCWA Water Project), and Master Response S (Water Supply).

Response to Comment #283-34:
Contrary to the comment, the DEIR discusses both water quality and groundwater impacts, including groundwater contamination and overdraft issues, in Section 4.5 (Hydrology and Water Resources) and Section 4.13 (Hazardous Materials). See also Master Response Q (SCWA Water Project) and Master Response S (Water Supply).

Response to Comment #284-01:
The DEIR considers cumulative impacts associated with habitat loss. As discussed on page #6.0-9 of the DEIR, land uses and development consistent with the Draft GP 2020, together with development in the county's nine cities and cumulative projects, would result in a significant loss of populations or essential habitat for special-status species and loss of sensitive natural communities. These would be significant cumulative impacts. Even with implementation of the proposed policies (as discussed in Section 4.6 Biological Resources), the Draft GP 2020 would make a cumulatively considerable contribution to biological resources impacts. In addition, land uses and development consistent with the Draft GP 2020, together with development in the nine cities and the cumulative projects, would adversely affect wildlife habitat and result in the obstruction of wildlife movement opportunities. This would also be a significant cumulative impact. Until a comprehensive baseline habitat survey is conducted, it is not feasible to determine what the appropriate standard will be. See also responses to comment #256-01 and #256-02

Response to Comment #284-02:
This comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #284-03:
The comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 Open Space and Resource Conservation Element calls for stronger tree protection measures.

Response to Comment #285-01:
The term "soil creep" is used to describe the seasonal down slope movement of soil. The mechanism of this slow, down slope soil movement is related to the expansion and shrinking of certain clay soils which are common in Sonoma County and coastal California. Soil creep is nearly imperceptible to the naked eye as it is the slowest kind of mass movement. Soil creep occurs in the uppermost layer of soil and occurs by expansion and contraction of the soil. When the soil expands, soil particles move outward perpendicular to the slope. Upon contraction the soil is pulled down slope under the influence of gravity. Expansion and contraction can be caused by freezing and thawing of soil as well as by the expansion and contraction of expansive clay soils subject to seasonal moisture changes. [8] However, in Sonoma County, the predominant mechanism of soil creep is related to expansive clay soils. Because of the local climate the process of soil creep due to freezing and thawing (in water saturated soils) would be very limited in extent and frequency.

[8] *The Physical Environment: an Introduction to Physical Geography,* Ritter, Michael E, 2006.

Montmorillite is the only expansive clay noted. Illite is a non-expansive clay mineral and is not relevant to the discussion of expansive clay soils. Section 4.7 (Geology/Soils) of the DEIR (page #4.7-10), in second sentence of paragraph captioned "Expansive and Creeping Soil") is revised as follows:

> "Expansion is most often caused by clay minerals, primarily montmorillonite and ~~illite~~ **related clay minerals**, although some rocks are also expansive including claystones or altered volcanic tuffs that contain large portions of montmorillonite."

Response to Comment #285-02:
The statement "The geology … is continually evolving because of its location at an active plate margin" is included in the Regional Geology section of the DEIR document. The intent of this statement is to inform the reader that the proximity of Sonoma County to the margin between the Pacific and North American tectonic plates continues to influence the geologic conditions of this region. These effects include, but are not limited to earthquakes, uplift, lateral displacements, etc.

The severity of an earthquake can be expressed in terms of both intensity and magnitude, but the terms describe different aspects of the earthquakes "size". Earthquakes can be measured using a number of systems including Modified Mercalli Intensity, Richter Magnitude, and Moment Magnitude. Although Moment Magnitude is the most recently developed of these three, other measurements are still used and referenced in the geologic literature, especially in referring to historic earthquakes, and in literature other than technical journals. Since the DEIR is not a technical journal addressed only to seismologists, structural engineers and related professionals, it is appropriate and common practice to use descriptions of earthquake energy, strength and intensity other than or in addition to Moment.

Intensity is based on the observed effects of ground shaking on people, buildings, and natural features. It varies from place to place within the disturbed region depending on the location of the observer with respect to the earthquake epicenter. Magnitude is related to the amount of seismic energy released at the hypocenter of the earthquake. It is based on the amplitude of the earthquake waves recorded on instruments, which have a common calibration. The magnitude of an earthquake is thus represented by a single, instrumentally determined value, whereas intensity represents observed effects. Exhibit #4.7-1 in the DEIR presents historic earthquakes as Richter magnitudes and estimated maximum credible earthquakes as moment magnitudes (because that is how they are referenced in the literature).
The Modified Mercalli Intensity Scale of 1931 is the basis for the U.S. evaluation of seismic intensity. Unlike earthquake magnitude, which indicates the energy an earthquake expends, Mercalli intensity denotes how strongly an earthquake affects a specific place or structure based on field observations. It has 12 divisions, using Roman numerals from I to XII. For example, a MM Intensity I earthquake is described as "Not felt except by a very few under especially favorable circumstances", and MM Intensity V earthquake is described as "Felt by nearly everyone; many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbance of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop". A MM Intensity X earthquake is described as "Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed over banks".

There are also other intensity scales such as the Rossi-Forel scale which was the first widely used intensity scale, devised in the late 1800s; the Omori scale which is used throughout Japan, and the European Macroseismic Scale which is the current standard in Europe. There are published tables that relate values of each scale to each other.

The Richter magnitude scale was developed in 1935 by Charles F. Richter as a mathematical tool to compare the size of earthquakes. The Richter magnitude of an earthquake is determined from the logarithm of the amplitude of waves recorded by seismographs. Adjustments are included in the magnitude formula to compensate for the variation in the distance between the various seismographs and the epicenter of the earthquakes. On the Richter Scale, magnitude is expressed in whole numbers and decimal fractions. For example, a magnitude of 5.3 might be computed for a moderate earthquake, and a strong earthquake might be rated as magnitude 6.3. Because of the logarithmic basis of the scale, each

whole number increase in magnitude represents a tenfold increase in measured amplitude. As an estimate of energy, each whole number step in the magnitude scale corresponds to the release of about 31 times more energy than the amount associated with the preceding whole number value.
Japanese seismologist Hiroo Kanamori developed the moment magnitude in 1977 to overcome limitations of the Richter Magnitude in measuring very large earthquakes. Moment is a physical quantity proportional to the slip [9] that takes place on the causative fault [10] during an earthquake, times the area of the fault surface that slips. The moment is related to the total energy released in the earthquake. The moment can be estimated from seismograms [11] and from geodetic measurements. The moment is then converted into a number similar to other earthquake magnitudes by a standard formula. The result is called the moment magnitude. The moment magnitude provides an estimate of earthquake size that is valid over the complete range of magnitudes, a characteristic that was lacking in other magnitude scales.
Section 7.1 (Report Preparers) identifies the preparer of the soils and geology sections of the DEIR. This individual is a Professional Geologist registered in the states of CA, OR and ID, with 30 years professional experience in the practice of engineering and environmental geology. He holds a BA in geology from UC Berkeley, and an MS in geology form CSU Hayward (now CSU East Bay).

Response to Comment #285-03:
Comment noted. Excellent quality hard copy maps have been available for use on request at the PRMD office and will continue to be provided in the next draft of GP 2020.

Response to Comment #285-04:
The significance criteria used in Section 4.7 (Geology/Soils) of the DEIR are taken directly from the Environmental Checklist Form in Appendix G of the State CEQA Guidelines. The judgment as to what is substantial is made by the preparers of the DEIR under the guidance of the consulting geologist.

Response to Comment #285-05:
Adoption of a policy that mandates an open-ended acceptance of any new data that comes along is not appropriate for this policy. Since the County does not know what new data may or may not become available or whether or not the data will be reliable, the use of the term "consider" in this context is proper. In addition, the proposed revision of the policy does not increase its effectiveness in reducing impacts of Draft GP 2020 for the simple reason that incorporating unknown data does not mitigate impacts.

Response to Comment #285-06:
Contrary to the comment, the effectiveness of "establishing a program for supporting research…" is very limited in reducing the geologic impacts of Draft GP 2020. Furthermore, the County lacks the financial resources to conduct geologic research on its own that essentially duplicates typical research efforts of the more qualified State Department of Conservation and academic institutions. Requiring developer fees in order to pay for geologic research is infeasible due to the lack of a legal nexus for such a fee.

Response to Comment #285-07:
The manner in which Policy PS-1f is implemented, particularly the details of the geologist's qualifications, is a matter for County administrative guidelines and not the General Plan. See Master Response C (Program EIR/Level of Detail) and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #285-08:
A review of the background section will show that the geology in the Sonoma County region of California is long and complex. In many places geologic formations have been displaced by tectonic activity occurring as far back as the Jurassic (145 to 208 million years ago), such as the wide spread Franciscan complex rocks. Faults in such formations are shown on geologic maps, but there has been no

[9] *Slip* is defined as the relative **displacement** of formerly adjacent points on opposite sides of a fault, measured on the fault surface. See USGS glossary of terms at http://earthquake.usgs.gov/learning/glossary.php?termID=174
[10] *Fault* is defined as a fracture along which the blocks of **crust** on either side have moved relative to one another parallel to the fracture. See USGS glossary of terms at http://earthquake.usgs.gov/learning/glossary.php?termID=174
[11] *Seismogram* is a record written by a seismograph in response to ground motions produced by an earthquake, explosion, or other ground-motion sources. See USGS glossary of terms at http://earthquake.usgs.gov/learning/glossary.php?termID=174

displacement or activity on these faults in millions of years. It would make no sense to include such ancient faults in earthquake hazard planning (especially with regard to fault setback zones). The criteria used for designating a fault as active is that of the California Geological Survey as described in Note 49, "Guidelines for Evaluating the Hazard Of Surface Fault Rupture, (California Department of Conservation, California Geological Survey, 2002). The relevant section of that document that best addresses the comment reads as follows:

> "The evaluation of a given site with regard to the potential hazard of surface fault rupture is based extensively on the concepts of recency and recurrence of faulting along existing faults. In a general way, the more recent the faulting, the greater the probability for future faulting (Allen, 1975). Stated another way, faults of known historic activity during the last 200 years, as a class, have a greater probability for future activity than faults classified as Holocene age (last 11,000 years), and a much greater probability of future activity than faults classified as Quaternary age (last 1.6 million years). However, it should be kept in mind that certain faults have recurrent activity measured in tens or hundreds of years whereas other faults may be inactive for thousands of years before being reactivated. Other faults may be characterized by creep-type rupture that is more or less ongoing. The magnitude, sense, and nature of fault rupture also vary for different faults or even along different strands of the same fault. Even so, future faulting generally is expected to recur along pre-existing faults (Bonilla, 1970). **The development of a new fault or reactivation of a long-inactive fault is relatively uncommon and generally need not be a concern in site development."**

Response to Comment #285-09:
The referenced policy addresses structures typically constructed by other public agencies, subject to state and federal standards. The policy encourages, rather than requires, enforcement because the County does not have permitting and code compliance jurisdiction over structures built by and/or approved by the State of California or other public entities; accordingly, "requiring" enforcement by these agencies is not a feasible mitigation measure. To the extent that building permit review and inspections are carried out by the County staff, compliance is provided. A policy encouraging enforcement is a legitimate measure to reduce seismic safety problems, although the extent of impact reduction is relatively small. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #285-10:
As the comment notes, Policy PS-1l does not mandate that all essential service and high occupancy buildings be located outside of areas with Very Violent, Violent, or Very Strong groundshaking. There are several reasons for this. First a large part of Sonoma County lies within these zones, leaving very few sites for these facilities in the County if such a prohibition were put into place. Much of the Larkfield, Airport, Bodega Bay, Santa Rosa Plain, Sonoma Valley, and other urban areas lie within these zones. It would be impractical to prohibit fire, police, and other emergency service facilities within the very areas where their services are needed. Also, the public agencies that site and construct these facilities are often limited by available properties and funding, reducing the options available for siting. Third, and most important, such facilities often must be located to avoid other environmental constraints that may be just as significant as site geology. As a result, facility siting must be based upon many factors.

The lead agency proposing or approving the use would be responsible for determining the location from a seismic safety perspective and for incorporating appropriate design to reduce potential damage.

Contrary to the comment, the DEIR does not state that this policy would fully mitigate Impact #4.7-1. In fact, Impact #4.7-1 is determined to be significant and unavoidable due to the inability to fully avoid the potential impacts of severe seismic events in Sonoma County. However, Policy PS-1j does contribute, along with other existing and proposed policies and standards, to impact reduction.

Response to Comment #285-11:
Any County ordinance regulating unreinforced masonry buildings would be required to comply with State law. As a result, adding language to restate this would not result in additional reduction of the impacts of Draft GP 2020.

Response to Comment #285-12:
The DEIR identifies policies PS-1a through PS-1g, PS-1k, and PS-1m as mitigation measures to reduce the impacts of Draft GP 2020 resulting from seismic related ground failure. All of these policies, coupled with existing regulations and requirements for structure location and design, provide as much mitigation reduction as feasible in this seismically active region. The proposed rewording of Policies PS-1c, PS-1d, and PS-1k would not provide additional mitigation as noted in response to comments #285-05, #285-06 and #285-14.

Response to Comment #285-13:
As noted in the DEIR on page #4.7-24, the entirety of Sonoma County is susceptible to ground failure of varying degrees and intensities. Avoiding development throughout the entire county is infeasible. Existing County regulations and proposed policies provide the maximum feasible mitigation to reduce these impacts of Draft GP 2020.

Response to Comment #285-14:
Draft GP 2020 Policy PS-1k calls for geologic review and mitigation as part of project design and construction for County projects. However, Policy PS-1k is recommended for the following revision to better correspond to the General Plan format:

> "Policy PS-1k: Incorporate measures to mitigate identified geologic hazards for **all County** roads, public facilities, and other County projects to acceptable levels."

Sonoma County does not have jurisdiction over timber harvest operations and their associated temporary roads. These plans and roads are considered as part of the State's review of Timber Harvest Plans.

Response to Comment #285-15:
The discussion of slope stability and landsliding on page #4.7-8 and under impact #4.7-3 recognize the kinds of landslides, speed of movement, and causative mechanisms for landslides. Debris flows are a specific kind of landslide and the DEIR impact analysis encompasses these types of landslides as well. While debris flows (and debris avalanches) are characterized by their rapid movement, they are not necessarily the most common or damaging kind of landsliding in Sonoma County. Other kinds of landslides can be life threatening in addition to debris flows (i.e. rock falls, cliff failures, stream or riverbank failures). To have a specific mitigation for each kind of landslide mechanism is not necessary in a General Plan. Site specific geologic and engineering studies (which are included in the DEIR's mitigation policies), prior to development in landslide prone areas would result in the identification and site specific mitigation of the potential for debris flows (as well as other kinds of landsliding and ground failures) to impact proposed development. Such policies include adherence to UBC grading and soils engineering requirements.

The DEIR recognizes that landslides can be triggered by a number of causes, including earthquakes, rainfall, wave erosion, flowing water, and man's activities.

Response to Comment #285-16:
See response to comment #285-12. It is true that the impact of non-extreme seismic and rainfall events cannot be completely eliminated, but they can be greatly mitigated. A policy of complete avoidance of development in areas of geologic impact would require zoning the county into areas of allowable and non-allowable development. Avoidance is only practical in cases where the risk can be clearly defined (i.e., set back from cliffs, setbacks from active faults, avoiding certain flood zones), and where there is no feasible or cost effective engineering solution. While the DEIR asserts that policies of the Draft GP 2020 would reduce the impact of landsliding (page #4.7-26), it acknowledges that the policies could not reduce the impact to a less than significant level. The impact would remain significant and unavoidably due to the pervasive nature of this hazard within the county.

In project designs (e.g., that require soils engineering, structural engineering, etc.) large or maximum credible events as specified in the UBC and local ordinances are used as the standard unless there is overriding project specific information to require a different, more conservative standard for design. Even

when using such standards, complete elimination of damaging impacts may not result. Impacts could still be significant in the most severe seismic and rainfall events.

Response to Comment #285-17:
The DEIR presents a discussion of subsidence to provide basic information on this particular geologic hazard, which has not been reported in Sonoma County.

The DEIR addresses the "site and project specific" impacts of subsidence because future projects in Sonoma County may be adversely affected by subsidence (such as projects constructed on man made fills, on compressible soils, or non-uniform soils). Such impacts can be mitigated through the policies presented in the Draft GP 2020.

Response to Comment #285-18:
The DEIR presents a discussion of subsidence to provide basic information on this particular geologic

hazard. This discussion first presents information on subsidence due to causes other than earthquakes and rainfall. The discussion also presents information on causes of subsidence related to earthquakes (liquefaction) and makes note of the fact that this kind of subsidence is due to a different mechanism than the preceding mechanisms.

Subsidence resulting from other than earthquake related causes could be reduced to less than significant (LTS) through standard geotechnical and structural engineering practices. However, subsidence due to seismic shaking could not be completely mitigated. Thus, for this kind of subsidence, the significance after mitigation would remain a significant unavoidable impact (SU). Therefore the discussion after Mitigation Measure #4.7-4 is revised as follows:

> **"Significance After Mitigation For subsidence caused by mechanisms other than earthquakes and maximum rainfall events, this would be a less than significant impact (LTS), and for subsidence caused by mechanisms of earthquakes or maximum rainfall events** this would be a significant and unavoidable impact (SU)."

Response to Comment #285-19:
The comment asks why Policies PS-1a through PS-1f, PS-k, and PS-1m (as revised) apply to tsunami and seiche impacts.
.
These policies apply to the referenced geologic hazards because all of these policies will help to identify

where projects might be impacted, identify methods during project planning and design to mitigate the hazards, and make regulators, developers and the public aware of such hazards.
The word "seiche" was introduced to science by the Swiss seismologist F.A. Forel in 1890. The term was previously used in the German-speaking part of Switzerland to describe oscillations in alpine lakes. The official definition from U.S. Army Corps of Engineers includes the following: "A standing wave oscillation of an enclosed water body that continues, pendulum fashion, after the cessation of the originating force, which may have been either seismic or atmospheric." Tidal forces can also produce seiches. Such oscillations affect lakes, reservoirs, ponds, bays and other closed or semi-enclosed bodies of water. Seiches are often generated in such bodies of water by small oscillations from earthquakes although wind or other disturbances can cause them. Seiches can have impacts to shoreline areas, similar to that of tsunamis.

The comment also asks why the DEIR does not include a specific policy for avoiding road building and other development in currently undeveloped seiche zones, and in zones undergoing significant sea cliff retreat. The above referenced policies would address this hazard by requiring identification of hazards and mitigating them to acceptable levels, using published geologic hazard maps, requiring technical reviews, etc. In some cases the mitigation might well be avoidance or no development. See response to comment #285-20 regarding the likely infeasibility of relocating existing residences and businesses.

Response to Comment #285-20:
The policies referenced in response to comment #285-18 are responsive to this concern. A more specific policy is not needed. The DEIR does not include a "policy for moving residences and businesses from those (high-risk tsunami) zones, and in undeveloped zones undergoing significant sea cliff retreat" for a number of reasons. These include the fact that such a policy would require a method to delineate which areas are to be covered by the policy, would require substantial funding to implement (e.g., for condemning property, relocating structures, purchasing new right-of-ways, etc.), and could result in substantial litigation. For these reasons, such a policy is likely infeasible.

Response to Comment #285-21:
The DEIR does not specifically address the potential for waves caused by landslides into bodies of water such as lakes, reservoirs, etc. because this is a very limited and special kind of geologic hazard that has not been reported to occur in Sonoma County. The causative mechanism would need to be a large, very rapidly moving landslide. The triggering mechanism would likely be a large earthquake. Identifying the locations of potential landslides of this kind along the shores of lakes and reservoirs in Sonoma County and predicting their future behavior would require exhaustive field work that is unnecessary for a General Plan Program EIR. The impacts of earthquakes are addressed in Section 4.7 (Geology and Soils) of the DEIR at a program level of detail appropriate for a General Plan. See also response to comment #262-59.

Response to Comment #285-22:
As noted in response to comment #285-14, Sonoma County does not have jurisdiction over logging roads associated with timber operations. Borrow pits for gravel or rock supplies fall under the jurisdiction of the County under the State Surface Mining and Reclamation Act. The County's regulations require that erosion and sedimentation be addressed as part of the review process for these mining sites. As noted in response to comment #285-12, PS-1c and PS-1k are not the only mitigation measures identified in the DEIR to reduce these impacts. Detailed construction standards are properly part of the County's implementing codes and administrative policies and not the General Plan.

Response to Comment #285-23:
The DEIR does recognize that current construction and engineering practices can and do reduce erosion to generally acceptable levels for all but severe rainfall and runoff conditions. Thus the present practices regulations and policies do reduce erosion to a less than significant level for most storm events. However, extreme conditions will reoccur and in these conditions, even with current policies and practices, erosion will occur to a significant degree, and in these cases it would be an unavoidable impact.

Response to Comment #285-24:
Policy PS-1f requires geologic reports prior to decisions on any project which would subject property or persons to significant risks from the geologic hazards shown on Figures #PS-1a through #PS-1i and related file maps and source documents (which include expansive soils). This policy states that geologic reports shall describe the hazards and include mitigation measures to reduce risks to acceptable levels. Policy PS-1f would require, where appropriate, an engineer's or geologist's certification that risks have been mitigated to an acceptable level. Registered engineers and geologists conducting investigations and preparing reports are qualified to recognize the very common hazard of expansive soils. Mitigations are made in project specific reports and include such things as special foundation design, lime treatment, subgrade preparation, overlaying with select fill, drainage improvements, or a combination of these and other designs. Engineers use the County Building Code (and UBC) as appropriate for a "standard" as well as the local standard of practice, and site and project specific conditions identified during site investigation and laboratory testing. Because of cost considerations, it would be unusual for expansive soils to be removed from a site. Typically other design mitigations are more cost effective. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #285-25:
The Draft GP 2020 is a General Plan which includes general policies that guide all future land uses and

development throughout the County. Implementation actions, regulations, and procedures that lay out how the policies would be specifically applied are contained in the various codes and programs that follow. Maintaining flood information is only part of the Draft GP 2020 Public Safety Element. This Element also provides policy guidance as to how this information would be applied to future decisions. See also Master Response C (Program EIR/Level of Detail) and Master Response D (Effectiveness of Mitigation Measures). In addition to Draft GP 2020 policies and programs, existing County regulations in flood hazard areas contribute substantially to reducing this impact.

Response to Comment #285-26:
As noted in response to comment #285-25, the Draft GP 2020 is a countywide planning document. The detailed regulations and other actions that implement Draft GP 2020 policies are either in place or would follow adoption of the Plan. The DEIR, under Impact #4.5-10, concludes that the impacts related to placement of housing or structures in the 100 year flood hazard areas is less than significant. It does not conclude that these impacts would be "completely avoided." The County's existing regulations, in addition to the policies of the Draft GP 2020 Public Safety Element, limit new housing in flood plain areas, and require that it be out of harm's way. In addition, housing is prohibited in floodways. See also Master Response C (Program EIR/Level of Detail) and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #285-27:
Existing County regulations and procedures currently provide for participation by the County with FEMA in that agency's periodic updates of flood hazard mapping. The maps for Sonoma County were updated as recently as the late 1990's and are currently in the process of being updated. The FEMA maps are the only available comprehensive source of flood hazard delineation available to the County. Draft GP 2020 policies call for utilizing FEMA maps in the future. As a result, should FEMA determine that 200 year flood maps are necessary; the County will assist FEMA in their assessment of the location of these flood hazard areas and continue to implement its flood management regulations according to these maps.

Response to Comment #285-28:
Contrary to the comment, the DEIR, under Impact #4.5-11, concludes that the Draft GP 2020 land uses and development in flood hazard areas would result in a significant unavoidable impact. The explanation is provided in the preceding text. However, as noted in that discussion, policies such as PS-2e, in combination with FEMA policies and County zoning regulations, will prevent most occurrences of flood flow impedance and flow redirection.

Response to Comment #285-29:
The explanation is provided in the text associated with each of the two impact discussions. The Draft GP 2020 land use maps only allow housing and other structures in flood hazard zones in very few areas of the County. In these areas, however, housing must be located either above or out of the flood zones. In addition, the proposed "no net fill" regulations will limit the impact of other structures in flood zones. On the other hand, the potential for drainage alterations is much more widespread, and include land uses and development that are not subject to County regulations. As a result, the potential for drainage alteration is greater than the potential for placement of structures in the flood zone.

Response to Comment #285-30:
See response to comment #262-59 and #285-21.

Response to Comment #285-31:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Current policies, procedures, and regulations applicable to remote development include review by responsible fire and emergency service personnel. Projects are routinely conditioned to provide for appropriate access and other fire safe mitigation measures. In addition, Public Safety Element Policy PS-3m has been revised to require automatic sprinklers in new development with some exceptions. Details would be determined as part of the Code implementation.

Response to Comment #285-32:

The Draft Water Resources Element includes policies which address groundwater quality impacts. For example, Policy WR-1g calls for minimizing deposition and discharge of pollutants into water bodies, including groundwater. Policy WR-1q requires that new development evaluate and consider potential groundwater contaminants. In addition, County operated solid waste facilities are subject to compliance with the County Integrated Waste Management Plan and review and approval by the applicable RWQCB to assure that potential groundwater contamination from all facilities is avoided.

Response to Comment #285-33:
Section 4.13 (Hazardous Materials) of the DEIR addresses the impacts of Draft GP 2020 on the release of hazardous materials under Impact #4.13-1. The DEIR concludes that the combination of existing regulations and all of the Draft GP 2020 Public Safety Element Policies PS-4a through PS-4o would reduce this impact to a less than significant level. As a result, further mitigation is not required. In addition, these policies already encourage and promote alternatives to pesticide use. They do not, however, require non-toxic alternatives since the use of pesticides falls under the sole jurisdiction of the State Department of Pesticide Regulation. See also Master Response B (Jurisdiction).

Response to Comment #286-01:
See Master Response E (Extent of Significant Impacts), Master Response G (Recirculation), and Master Response H (Range of Alternatives).

Response to Comment #286-02:
Contrary to the comment, Draft GP 2020 includes a countywide strategy for addressing groundwater issues in the Water Resources Element. See Master Response R (Groundwater Management).

It should also be noted that the Sonoma County Water Agency does not make plans for growth. Rather, the Agency is responsible for providing water supplies for its contractors, most of whom are municipalities that are responsible for planning for their own growth. See also Master Response Q (SCWA Water Project) and Master Response S (Water Supply).

Response to Comment #286-03:
As noted in Section 4.9 (Public Services) of the DEIR, Draft GP 2020 provides goals, objectives, and policies in the Draft Water Resources Element that address future water supply planning for the County, the cities, and public water suppliers. These policies call for increasing the available data regarding groundwater conditions and sustainable yields as well as management actions necessary to address supply issues. As the DEIR also notes, available funding to implement management actions in the future is uncertain. Until conservation measures are adopted and implemented as provided in Draft GP 2020, it is not known how much of the future demand can be met through such measures. See also Master Response Q (SCWA Water Project), Master Response R (Groundwater Management), and Master Response S (Water Supply).

Response to Comment #286-04:
As noted in Section 4.5 (Hydrology and Water Resources), wastewater disposal by public wastewater management systems and other sources is subject to a variety of federal and state water quality standards, including those imposed by California Code of Regulations, Title 22, Division 4, Chapter 3, and implemented by the Regional Water Quality Control Boards. These regulations, and new policies included in GP 2020, would reduce water quality impacts to less than significant.

As noted in Section 6.2 (Cumulative Impacts), the DEIR includes future City public service and infrastructure projects, including the City of Santa Rosa's Integrated Recycled Water Program (IRWP), in its assessment of impacts of future land uses and development allowed by Draft GP 2020 at a programmatic level of detail appropriate for a General Plan. Impacts to water quality, including from the use of treated wastewater for agricultural, landscaping, and other purposes are addressed in Impact #4.5-4 (Wastewater Disposal).

Response to Comment #286-05:
The comment pertains to policy issues of Draft GP 2020 and not to the adequacy of the DEIR. Existing

water quality regulations and Draft GP 2020 Water Resources Element policies address the quality of treated water utilized for agriculture and landscaping.

Response to Comment #286-06:
Conditions at the existing landfill are part of existing conditions and not an impact of Draft GP 2020. See Master Response M (Solid Waste Management) regarding the County's remediation of this issue.

Response to Comment #286-07:
See Master Response M (Solid Waste Management). Contrary to the comment, it is not necessary for the Draft GP 2020 or the DEIR to ensure that solid waste is not transported outside Sonoma County.

Response to Comment #286-08:
Solid and biosolid wastes exported from Sonoma County cannot be applied to land without meeting all applicable federal, state, and local regulations established to protect the health and safety of people and the environment in the relevant area. Biosolid land applications are heavily regulated by various federal and state agencies, including the Regional Water Quality Control Boards, the Department of Health Services, and the State and Federal Environmental Protection Agencies. Project level and cumulative impacts would be addressed during the review of specific land application project proposals. Many of these issues have also been addressed in the Statewide Biosolids Land Application EIR, available here: http://www.swrcb.ca.gov/programs/biosolids/biosolids.html. See also response to comment #262-68 and Master Response M (Solid Waste Management).

Response to Comment #286-09:
County solid waste is temporarily being hauled to other landfills in California, including the Redwood Sanitary Landfill. The quality of the solid wastes that are exported are subject to the regulatory requirements of the receiver landfill and the applicable Regional Water Quality Control Board. Hazardous wastes must be disposed of in accordance with County and State regulations. See also Master Response B (Jurisdiction), Master Response C (Program EIR/Level of Detail), and Master Response M (Solid Waste Management).

Response to Comment #286-10:
While Sonoma County currently does not landfill any solid waste, the use of the Central Disposal Site as a transfer station for solid waste disposal at out-of-County sites is considered to be temporary, and significant capacity still exists at this facility. See also Master Response M (Solid Waste Management).

Response to Comment #286-11:
The relatively small number of additional truck trips generated by diversion of solid waste from the Central Disposal Site will not result in additional significant impacts to air quality. In addition, the use of the Central Disposal Site as a transfer station for solid waste disposal at out-of-County sites is considered to be temporary at this time. See also Master Response M (Solid Waste Management).

Trains have lower emissions per ton/mile than trucks, so rail shipment also would not result in additional significant impacts to air quality.

Response to Comment #286-12:
Comment noted. However, the policy depends largely upon actions taken by the cities, contractors, and public water suppliers not under the jurisdiction of the County of Sonoma. Rather than a critical lapse, this policy is recognizes the fact that agencies must work together in order to fully integrate water supply and land use policy. See Master Response B (Jurisdiction) and Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #286-13:
These issues are discussed in Section 4.9 (Public Services) of the DEIR at an appropriate level of detail for a program EIR for a General Plan.

Response to Comment #286-14:

CEQA does not require that social impacts be addressed in an EIR except to the extent they result in secondary physical impacts. However, the other public service impacts of Draft GP 2020 are addressed in Section 4.9 (Public Services).

Response to Comment #286-15:
This comment requests cost and rate information for projects of the SCWA and does not relate to the adequacy of the DEIR. Costs and rates are not an environmental impact, and CEQA does not require their analysis in an EIR.

Response to Comment #286-16:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The costs of proposed improvements are outside the purview of an environmental document under CEQA.

Response to Comment #286-17:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Information about affordable housing, including its definitions and current subsidy, can be found in the General Plan Housing Element, which was adopted in 2001. The Housing Element is not under consideration as a part of the Draft GP 2020.

Response to Comment #286-18:
This comment does not pertain to the adequacy of the DEIR. The Housing Element is not under consideration as a part of the Draft GP 2020.

Response to Comment #286-19:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Land use policies of the City of Rohnert Park are not within the jurisdiction of the County of Sonoma.

Response to Comment #286-20:
The DEIR discusses this impact in Section 4.8 (Agricultural and Timber Resources). The conversion of land near Sonoma State University is proposed by the City of Rohnert Park rather than Sonoma County. The decision making body for annexation of this land is the Sonoma County Local Area Formation Commission (LAFCO). Draft GP 2020 policies that reduce conversion of agricultural land are urban service boundaries, low residential densities in rural areas, right to farm protection, agricultural support uses, etc. identified under Impact #4.8-1.

Response to Comment #286-21:
The County does not have available statistics on the number of agriculturally zoned parcels that may be recognized by an ACC. The impacts of a relatively greater level of ACC recognition are included in the analysis of the Buildout Alternative in Section 5.0 (Alternatives) of the DEIR..

Response to Comment # 286-22:
The mapping requested by the comment is not available. Please note that Draft GP 2020 Policy LU-1q calls for mapping of ACC lots by the County Assessor.

Response to Comment # 286-23:
Certificates of Compliance are explained in Section 66499.33 and 35 of the California Government Code. They are a recorded determination by a local agency that a piece of real property complies with the applicable provisions of the Subdivision Map Act and of local ordinances enacted pursuant to it. The County uses the term “Administrative Certificate of Compliance” since the determination is not discretionary and is based solely on a factual review of the parcel’s history and the applicable regulations.

Response to Comment #286-24:
The Draft GP 2020 includes numerous policies that protect agricultural lands from encroachment and sprawl, as described in Sections 4.1 (Land Use, Housing, and Population) and 4.8 (Agricultural and

Timber Resources) of the DEIR. However, decisions regarding the expansion of cities are made by the applicable City and by the Sonoma County Local Agency Formation Commission (LAFCO). These decisions are not under the jurisdiction of the County of Sonoma.

It should be noted, however, that most cities in Sonoma County have adopted Urban Growth Boundaries that set their future boundaries. Also, Draft GP 2020 includes designated Urban Service Areas around the cities which correspond to these voter-approved boundaries.

Response to Comment #286-25:
Comment noted. The DEIR notes on page #4.5-49 that water quality could be affected by the reuse of treated wastewater for agricultural purposes. Draft GP 2020 Policy WR-4j calls for recycled wastewater to be applied in the appropriate quantities for the intended use and to meet water quality standards.

Response to Comment #286-26:
Comment noted. See response to comment #286-25.

Response to Comment #286-27:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The support for agriculture through the availability of either fresh or recycled wastewater is not growth inducing, as a viable and sustainable agricultural economy in Sonoma County protects against the spread of development into rural areas. Further, the freeing up of fresh water for water supply for urban development is linked to the planned growth of the County and Cities and is therefore growth accommodating rather than growth inducing.

Response to Comment #286-28:
Comment noted. See responses to comments #237-123, #252-13, and #252-24, Master Response P (Urban Water Management Plans), and Master Response S (Water Supply).

Response to Comment #286-29:
Following are responses to each point of the comment regarding the cumulative impacts of recycled water use:

Potential water quality impacts of large scale use of treated wastewater to groundwater were addressed in some detail in the environmental documents for Santa Rosa Subregional Long-Term Wastewater Disposal Project Final EIR in 1997 (amended 2000). No significant impacts on soil and groundwater were identified in that document associated with use of treated wastewater for agricultural or urban landscape irrigation. See also response to comment #250-01, #262-38, and #263-13.

To the extent that water supply limits or constrains growth of unincorporated areas of the county, the use of recycled water can be considered to be growth inducing. However, in reality, generous water conservation and water reuse have been factored into water supply projections, for instance in the updated Urban Water Management Plan prepared by Sonoma County Water Agency (SCWA), so this effect is not considered significant. One of the goals of the SCWA is to accommodate planned growth in an efficient and environmentally safe fashion rather than to control growth by creating artificial supply problems.

The cumulative impacts of the SCWA water transmission to Sonoma Valley and Marin were addressed in the environmental document on the transmission system proposal. They were not considered to be significant.

The SCWA and other public water suppliers do not wheel or sell treated wastewater, as such. Rather, they recognize the beneficial uses of treated wastewater as a resource, and the inherent technical difficulties, inefficiencies, and high costs of isolating and returning treated water to its basin of origin. For instance, some of the water delivered to the City of Petaluma, a SCWA contractor, will be highly treated and discharged in a polishing wetlands that will provide enhanced biological resource values and public access. It would not be cost effective and does not make sense for the City of Petaluma to pump the

treated wastewater back to the Russian River basin, or in an extreme case to the Eel River, assuming that the original source of the water can be tracked and segregated.

The potential impacts of use of treated wastewater to fish stocks within the Russian River have been generally addressed in several EIRs, including the Santa Rosa Subregional Long-Term Wastewater Disposal Project Final EIR in 1997 (amended 2000) and most recently, for the Monte Rio Wastewater Project, which would use the recycled water for pasture irrigation of the Sheridan Ranch. No significant impacts were identified, provided Best Management Practices for irrigation water management are closely followed.

Response to Comment #286-30:
Comment noted.

Response to Comment #286-31:
Comment noted.

Response to Comment #286-32:
Comment noted. See Master Response N (Climate Change).

Response to Comment #286-33:
See Master Response N (Climate Change).

Response to Comment #286-34:
Impacts to Highway 101 and alternative routes are discussed in Section 4.2 (Transportation) of the DEIR.

Response to Comment #286-35:
The water quality impacts of Draft GP 2020 are identified in Section 4.5 (Hydrology and Water Resources) of the DEIR. Cumulative impacts, including those resulting from cities, are identified in Section 6.2 (Cumulative Impacts).

Response to Comment #286-36:
Alternatives to the project are identified, described, and analyzed in Section 5.0 (Alternatives) of the DEIR. Mitigation measures for water quality impacts are identified in Section 4.5 (Hydrology and Water Resources) of the DEIR.

Response to Comment #286-37:
See the discussion in the DEIR under Impact #4.9-6, response to comment #286-09, and Master Response M (Solid Waste Management).

Response to Comment #286-38:
See response to comment #262-68.

Response to Comment #286-39:
See response to comment #262-68.

Response to Comment #286-40:
See response to comment #262-68.

Response to Comment #286-41:
See response to comments #286-09 and #262-68.

Response to Comment #286-42:
See response to comments #262-68.

Response to Comment #286-43:
As noted in Section 4.9 (Public Services) and Section 4.2 (Transportation) of the DEIR, funding of public

services and infrastructure in the future is uncertain. That is one of the reasons why the DEIR concludes that many public services impacts are significant and unavoidable. See also Master Response E (Extent of Significant Impacts).

Response to Comment #286-44:
The answer to this question is unknown to the preparers of the DEIR. As in the past, funding for public services will likely continue to be a mixture of various sources and will continue to rely heavily upon budget decisions made by the federal, state, county, and city governments, as well as the general public.

Response to Comment #286-45:
The comment is not specific to any particular service or infrastructure, but Sections 4.2 (Transportation), and 4.9 (Public Services) of the DEIR address the impacts on public services and infrastructure resulting from Draft GP 2020.

Response to Comment #286-46:
The following sentence on page #4.5-1, in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "The term watershed refers to an area that is tributary to or drains to a particular river or creek system. Hydrologically, land in Sonoma County falls within ~~seven~~ **eight** distinct watersheds, of which the Russian River watershed is the largest in terms of area, runoff volume, number of cities and population."

In addition, the referenced paragraphs and heading on page #4.5-14 in Section 4.5 (Hydrology and Water Resources) is revised as follows:

> "Estero Americano Watershed
>
> The Estero Americano watershed is located in both Sonoma and Marin Counties and drains an approximate area of 49 square miles in Sonoma County. Elevations in the watershed range from just above sea level at the town of Bodega Bay and Bodega Harbor to roughly 650 feet in northern portions of the watershed. Creeks and tributaries in the watershed drain south to the Estero Americano, which flows west along the Sonoma / Marin County border to empty into the Pacific Ocean at a large natural tidal lagoon or estuary. Major tributaries to the Estero Americano include Cheney Gulch, Johnson Gulch, **and** Ebabias Creek~~, and Stemple Creek~~. The majority of the Estero Americano watershed is in non-intensive agricultural production, with some oat hay lands, irrigated pasture, and extensive areas of dry pasture. Dairies and beef and sheep livestock ranches constitute a considerable portion of the watershed economy."
>
> ~~"Stemple Creek Subbasin~~ **Stemple Creek Watershed**
>
> The Stemple Creek ~~subbasin~~ **watershed**, a **coastal** tributary ~~to~~ **adjacent to and generally south of** the Estero Americano watershed, is located in both Sonoma and Marin Counties. The ~~subbasin~~ **watershed** begins just west of the City of Petaluma and empties into the Pacific Ocean**.** ~~through the~~ Estero de San Antonio in Marin County **is the mouth of the Stemple Creek watershed**. The creek drains approximately 22 square miles of southern Sonoma County. ~~Subbasin~~ **Watershed** elevations range from 600 feet MSL in the northern upland areas of the watershed to roughly 50 feet MSL in the south.
> Virtually the entire Stemple Creek ~~subbasin~~ **watershed** is in non-intensive agricultural production, predominantly dry farmed hay production and pasture. Dairies and beef and sheep livestock ranches are the mainstay of the subbasin economy, while…"

Response to Comment #287-01:
See Master Response M (Solid Waste Management).

Response to Comment #287-02:

See response to comment #286-09 and Master Response M (Solid Waste Management).

Response to Comment #287-03:
See response to comment #286-09 and Master Response M (Solid Waste Management). As noted in Master Response M, the CoIWMP is the policy document for solid waste management in the County and includes policies to reduce the waste stream.

Response to Comment #288-01:
The project proposed on the Agilent site is under the jurisdiction of the City of Rohnert Park and not the County of Sonoma or Draft GP 2020. The DEIR includes the planned future development in the Rohnert Park General Plan, as part of its analysis of impacts such as transportation, air quality, noise, land use, and other sections that evaluate cumulative impacts.

Response to Comment #288-02:
Section 4.2 (Transportation) of the DEIR addresses the traffic impacts of Draft GP 2020 land uses and development, and specifically considers impacts on local roads from growth in both the cities and the County under Impact #4.2-1. The land uses and development evaluated in the DEIR include development projected in the cities, including Rohnert Park, in accordance with their General Plans. The City of Rohnert Park General Plan includes the Agilent site.

Response to Comment #288-03:
See Master Response R (Groundwater Management). With respect to the requirements for fire sprinklers, the comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been submitted to the decision making bodies for consideration. See also response to comment #285-31.

Response to Comment #288-04:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Standard County procedures for review of County sponsored public projects and discretionary private projects include meaningful public input during the project level process. Widening of certain roads (e.g., Highway 12 in Sonoma Valley and Petaluma Hill Road in Penngrove) has been rejected due to community and environmental impacts.

Response to Comment #288-05:
The acreage of agricultural land that would be lost as a result of restrictions on cultivation along ephemeral streams was not calculated in the DEIR. Rather, the DEIR looked at the proposed policy to establish restrictions on cultivation along designated streams mapped by the USGS, which was estimated to affect 61,000 acres. Since data regarding the location and extent of ephemeral streams in Sonoma County are not available, it is not feasible to calculate these figures. However, the Mitigated Alternative in Section 5.0 (Alternatives) of the DEIR assumed that policies of Draft GP 2020 Open Space and Resource Conservation Element would restrict these uses along ephemeral streams. As a result, the impact analysis in this section provides and identifies this additional impact at a qualitative level of detail.

Response to Comment #288-06:
See response to comment #228-10.

Response to Comment #288-07:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #288-08:
Rather than a typical EIR that addresses the impacts of a specific development project, the Draft GP 2020 DEIR is a Program EIR which identifies the impacts of all future land uses and development at a countywide level of detail. As a result, mitigation measures are found in Draft GP 2020 goals, objectives, and policies. To the extent that the inclusion of such policies in the Draft GP 2020 would reduce

environmental impacts, the policies are, in effect, mitigation measures. See also Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #288-09:
The DEIR considers the impacts of Draft GP 2020 on neighboring jurisdictions in general ways. First, the traffic model utilized in the transportation analysis (Section 4.2) considered traffic flows into and out of the County. Second, this analysis includes traffic in the cities within Sonoma County. Third, Section 4.5 (Hydrology and Water Resources) includes the Russian River Water Project of the Sonoma County Water Agency, which has components in both Mendocino and Humboldt Counties. Finally, Section 6.2 (Cumulative Impacts) addresses impacts of both County and City land uses.

Response to Comment #288-10:
See Master Response N (Climate Change).

Response to Comment #288-11:
See Master Response R (Groundwater Management).

Response to Comment #288-12:
See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #288-13:
See response to comment #285-27. In addition, the Draft GP 2020 Water Resources Element Section 3.6 includes policies and programs that call for watershed assessments where appropriate to address water related issues such as flooding and water quality.

Response to Comment #288-14:
Section 4.5 (Hydrology and Water Resources) of the DEIR notes on page #4.5-20 that the quality of groundwater has been affected by various factors. The comment is correct in noting that some constituents in groundwater are naturally occurring. Arsenic, the most prominent naturally occurring contaminant in parts of Sonoma County, is a highly toxic chemical acquired and transported by groundwater as it flows through bedrock formations. Depending on the amount present, long term exposure to arsenic has been linked to cancer of the bladder, lungs, skin, kidneys, nasal passages, liver, and prostate. Draft GP 2020 Policy WR-2j includes “assessment of nitrates, boron, arsenic, saltwater and other water quality contaminants” in proposed groundwater assessments. Policy WR-2c would also require groundwater wells to include groundwater quality standards. Individual private and certain small water systems may not be able to achieve Safe Drinking Water Act (SDWA) standards for arsenic levels even with treatment, either administratively, or technically. In such cases, properties that would rely on groundwater with elevated arsenic may not be developable (in part because of high arsenic water treatment costs), or may require use of outside potable water sources. Existing residents using wells with high levels of arsenic may need to rely on bottled water for cooking and drinking water purposes. Although administered and enforced by the County, arsenic standards are promulgated by EPA and state regulations.

Response to Comment #288-15:
See response to comment Master Response Q (SCWA Water Project) and Master Response S (Water Supply).

Response to Comment #288-16:
See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #288-17:
See response to comment #218-23, #218-25, #218-32 and #218-179.

Response to Comment #288-18:
See Master Response P (Urban Water Management Plans).

Response to Comment #288-19:
See response to comment #218-64.

Response to Comment #288-20:
See response to comment #14-02.

Response to Comment #288-21:
Comment noted.

Response to Comment #288-22:
See Master Response D (Effectiveness of Mitigation Measures). The Endangered Species Act is described in the Regulatory Setting in Section 4.6 (Biological Resources) of the DEIR on page #4.6-23.

Response to Comment #288-23:
See Master Response G (Recirculation).

Response to Comment #288-24:
See response to comment #235-05, #235-06, and #235-08. See also Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #288-25:
See response to comment #262-20.

Response to Comment #288-26:
Comment noted. However, the DEIR properly identifies policies in each of the Draft GP 2020 Elements that pertain to each particular topical section of impact analysis. This is done in a way that conforms to CEQA requirements and guidelines for organization of an EIR.

Response to Comment #288-27:
See response to comments #240-04 through #240-13 and Master Response N (Climate Change).

Response to Comment #288-28:
See response to comments #240-04 through #240-13 and #244-04 and Master Response N (Climate Change).

Response to Comment #288-29:
See response to comments in letter #243.

Response to Comment #288-30:
See Master Response N (Climate Change) and response to comments in letter #228.

Response to Comment #288-31:
See response to comments in letter #228.

Response to Comment #288-32:
See response to comment #235-05, #235-06, and #235-08.

Response to Comment #288-33:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #289-01:
For some impacts, the impact is greater under the proposed project than under the No Project Alternative. For example, increased rail noise (Impact #4.4-3) would be greater under Draft GP 2020 than under the proposed project due to the inclusion of the passenger rail system in Draft GP 2020. Similarly, some of the alternatives would result in a greater impact than under the proposed project, although this

comparison is not provided in the DEIR. For example, the Buildout Alternative includes provision for more resorts in rural areas than under the No Project Alternative, resulting in an increase in a variety of impacts.

Response to Comment #289-02:
See Master Response C (Program EIR/Level of Detail). See also response to comment #289-03.

Response to Comment #289-03:
See response to comment #273-01.

Response to Comment #289-04:
Comment noted. The loss of agricultural land to biotic resource protection is addressed in Section 4.8 (Agricultural and Timber Resources) of the DEIR. As noted, the economic impact to the agricultural industry of the proposed policy is outside the scope of an EIR.

Response to Comment #289-05:
See response to comment #256-01.

Response to Comment #289-06:
See response to comment #256-01 and #256-02.

Response to Comment #289-07:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #289-08:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #289-09:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #289-10:
The DEIR addresses the impacts of all land uses and development under Draft GP 2020, including mining operations, in each of the topical sections. Draft GP 2020 includes Objective OSRC-13.1 and Policy OSRC-13a and OSRC-13b establishing the ARM Plan as the policy document for mining operations in the County and for providing mitigation of the impacts of mining operations. These policies require the environmental impacts of any mining proposal to be assessed and mitigated to the degree possible prior to commencement and require mining operations to be compliant with the policies procedures and standards in the ARM Plan. These policies seek to phase out terrace mining and no new terrace mining pits are anticipated for the duration of the 2020 General Plan. The proposed 2020 General Plan does not revise or depart from the existing mineral policies. See also responses to comments #218-50, #252-26, and #259-01.

Response to Comment #289-11:
See responses to comments #283-22 and #283-24 and Master Response H (Range of Alternatives) and Master Response E (Extent of Significant Impacts).

Response to Comment #289-12:
See response to comment #283-22, #283-24, and Master Response H (Range of Alternatives).

Response to Comment #289-13:
See response to comment #283-26 and #283-27.

Response to Comment #289-14:

See Master Response N (Climate Change).

Response to Comment #289-15:
See response to comment #283-29.

Response to Comment #289-16:
See Master Response P (Urban Water Management Plans), Master Response R (Groundwater Management), and Master Response S (Water Supply).

Response to Comment #289-17:
See Master Response L (Airport Master Plan). The noise and safety impacts of the Draft GP 2020 Air Transportation Element are addressed in Section 4.4 (Noise) and Section 4.2 (Transportation) of the DEIR. See also response to comment #254-05.

Response to Comment #289-18:
Section 4.4 (Noise) of the DEIR discusses transportation related noise under Impacts #4.4-1 (Increased Traffic Noise Levels) and #4.4-5 (Airport Noise). The DEIR concludes that traffic noise levels would be significant and unavoidable and that impacts related to Airport Noise would be less than significant. Traffic and airport noise impacts are averaged over a 24 hour period with decibel reductions for nighttime hours. Impacted areas are located adjacent to highway and roadway corridors and in very close proximity to airports and flight paths as shown in Exhibit #4.4-2. Appendix #7.7 represents predicted Ldn noise levels at 50 feet from roadway centerline for both the existing and 2020 traffic levels. This table concludes that the difference in existing and 2020 decibel levels for Highway 128 ranges from approximately 1 to 2 decibels. There is a 1.5 decibel margin of error for the roadway noise modeling. The changes in decibel levels along Highway 128 in the Knight Valley area are well below the thresholds of Exhibit #4.4-12 and are not considered substantial changes in the ambient noise level in that area. See also response to comment #224-06.

Response to Comment #289-19:
See response to comment #224-05.

Response to Comment #289-20:
The comment refers to Section 4.4 (Noise) of the DEIR under Impact #4.4-4. The Draft GP 2020 contains Policy NE-1c to protect existing noise sensitive uses from the noise impacts of new stationary noise sources. These policies would be applied through a future discretionary review process in which an acoustical analysis and proposed mitigation measures specific to the project would be prepared. The DEIR concluded that this impact would be less than significant. See response to comment #224-11 and 230-27 and Master Response C (Program EIR Level of Detail).

Response to Comment #289-21:
See responses to comments #224-09, #224-10, and #224-11.

Response to Comment #289-22:
See response to comment #224-08, #224-12, and #254-06.

Response to Comment #289-23:
The comment does not pertain to the adequacy of the DEIR. See also response to comment #224-08.

Response to Comment #289-24:
See Master Response A (DEIR Review Period).

Response to Comment #289-25:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #289-26:

Transportation impacts resulting from land uses and development under both Draft GP 2020 and the cities' projected growth are addressed in Section 4.2 (Transportation). However, neither the County nor the SCTA has jurisdiction over the cities. Draft GP 2020 Policies CT-1m, CT-1n, CT-1o, CT-5b, CT-5c, CT-5d, and CT-5f specifically address the establishment of a mechanism for regional transportation mitigation fees.

Response to Comment #289-27:
The comments pertain to policy issues of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. The County is not responsible for the flood mapping prepared by FEMA, other than to participate with FEMA in the periodic review of flood hazards in the County. See also response to comments #7-05 and #218-103 and Master Response B (Jurisdiction). The Draft GP 2020 Public Safety Element has been modified to include Policies PS-2g, PS-2h, and PS-2i calling for cooperative efforts to address flooding problems in several cities, including Petaluma.

Response to Comment #289-28:
See Master Response M (Solid Waste Management).

Response to Comment #289-29:
See Master Response Q (SCWA Water Project)

Response to Comment #289-30:
The impacts of Draft GP 2020 designations of affordable housing sites are addressed in Section 4.1 (Land Use, Population, and Housing) of the DEIR under Impact #4.1-4 and throughout the topical sections of the DEIR. The impacts of Draft GP 2020 on water supply, wastewater, and other public services are addressed in Section 4.9 (Public Services).

Response to Comment #289-31:
The DEIR, in Section 4.9 (Public Services) discusses public education services. Impact #4.9-8 (Demand for Public Education Services) has been found to be less than significant. All new residential development is required to pay school mitigation fees as provided under State law.

Response to Comment #289-32:
The impacts of Draft GP 2020 land uses and development on wastewater system capacity is addressed in Section 4.9 (Public Services). The analysis includes an assessment of capacity issues in the Larkfield community.

Response to Comment #289-33:
Section 4.9 (Public Services) of the DEIR addresses the impacts of Draft GP 2020 land uses and development on public services, including Impact #4.9-1regarding water supply capacity for urban areas. In that section, the California American Water Company capacity to serve projected growth in the Larkfield-Wikiup area is identified as a "significant concern" in Exhibit #4.9-8, contributing to the conclusion that Impact #4.9-8 is significant and unavoidable. Draft GP 2020 and the DEIR include policy mitigation measures to address this impact, including the use of surface water from the SCWA Water Project or development of additional groundwater sources. The water supplier would have to confirm the availability of water supply for any future development projects, including affordable housing projects, in order to be approved by the County.

Response to Comment #289-34:
See Master Response A (DEIR Review Period).

Response to Comment #289-35:
Comment noted.

Response to Comment #289-36:
As noted in Section 4.7 (Geology and Soils) of the DEIR, subsidence can be caused by withdrawal of

groundwater from subsurface reservoirs, but has not been reported to exist in Sonoma County. See also response to comment #282-02.

Response to Comment #289-37:
See Master Response E (Extent of Significant Impacts).

Response to Comment #289-38:
See response to comment #266-07 and Master Response J (Buildout).

Response to Comment #289-39:
Comment Noted. See Master Response A (DEIR Review Period).

Response to Comment #289-40:
See Master Response A (DEIR Review Period).

Response to Comment #289-41:
Comment noted.

Response to Comment #289-42:
See response to comment #218-23, #218-25, #218-32 and #218-179.

Response to Comment #289-43:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #289-44:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #289-45:
See response to comment #218-43.

Response to Comment #289-46:
See Master Response A (DEIR Review Period).

Response to Comment #289-47:
See Master Response P (Urban Water Management Plans).

Response to Comment #289-48:
See Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #289-49:
See Master Response A (DEIR Review Period).

Response to Comment #289-50:
See Master Response N (Climate Change).

Response to Comment #289-51:
See Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #289-52:
See Master Response T (Listing of Impaired Water Bodies).

Response to Comment #289-53:
See response to comments #285-14, #285-15, and #285-16.

Response to Comment #289-54:
See response to comments #285-16 and #285-23. The DEIR's conclusion is based upon the premise that no matter how well existing regulations and Draft GP 2020 policies reduce potential impacts from flooding and geologic hazards, there will always be a level of risk of seismic activity or rainfall events that could exceed design standards and cause significant damage.

Response to Comment #289-55:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Policy PS-1g prohibits habitable structures within 50 feet of any fault and is an appropriate mitigation to reduce Impact #4.7-1. In fact, this policy is in effect currently and is implemented through existing regulations. The basis for selection of the fault zones is the geologic mapping of "Alquist-Priolo" fault zones which are considered "active faults" by the State Department of Conservation.

Response to Comment #289-56:
See Master Response A (DEIR Review Period).

Response to Comment #289-57:
See responses to comments in letter #235 of the Sonoma County Water Coalition. See also Master Response Q (SCWA Water Project), Master Response R (Groundwater Management), and Master Response S (Water Supply). With respect to water exports, Draft GP 2020 does not propose to increase water exports. If in the future, additional water exports are proposed by water providers, the impacts of the project would be addressed as part of the environmental impact review conducted by the applicable lead agency. See also response to comment #235-25.

Response to Comment #289-58:
See Master Response A (DEIR Review Period).

Response to Comment #289-59:
See response to comment #237-112.

Response to Comment #289-60:
See Master Response D (Effectiveness of Mitigation Measures).

Response to Comment #289-61:
See response to comments #6-08. The proposed Policy WR-1j regarding slopes over 35% is only one mitigation measure for reducing erosion and sedimentation. Existing regulations, in addition to Policies WR-1a, WR-1e, WR-1g, WR-1h, and WR-1i, contribute to the reduction of these impacts to a less than significant level.

Response to Comment #289-62:
The process provides for the Planning Commission to recommend Draft GP 2020 and the Final EIR together. This is accomplished by preparing the Final EIR to reflect the Draft GP 2020 as it has been revised and recommended by the Commission.

Response to Comment #289-63:
See Master Response D (Effectiveness of Mitigation Measures) and Master Response F (Explanation for Lack of Mitigation Measures).

Response to Comment #289-64:
See response to comment #237-76.

Response to Comment #289-65:
Comment noted. Public notices for the project included proposed amendments to Area Plans and Specific Plans associated with Draft GP 2020.

Response to Comment #289-66:
See Master Response A (DEIR Review Period).

Response to Comment #289-67:
See Master Response A (DEIR Review Period).

Response to Comment #289-68:
See Master Response N (Climate Change).

Response to Comment #289-69:
See Master Response E (Extent of Significant Impacts).

Response to Comment #289-70:
See Master Response A (DEIR Review Period).

Response to Comment #289-71:
Comment noted. Draft GP 2020 proposes a new Water Resources Element that establishes countywide water resource goals, objectives, and policies, including a section on groundwater. The impacts of Draft GP 2020 on water resources are addressed in Section 4.5 (Hydrology and Water Resources) and in Section 4.9 (Public Services). See also Master Response R (Groundwater Management) and Master Response S (Water Supply).

Response to Comment #289-72:
See Master Response A (DEIR Review Period).

Response to Comment #289-73:
See response to comment #289-71.

Response to Comment # 289-74:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Flooding impacts of Draft GP 2020 are analyzed in Section 4.5 (Hydrology and Water Resources) of the DEIR.

Response to Comment #289-75:
Noise from increased traffic levels are discussed In Section 4.4 (Noise) of the DEIR under Impact #4.4-1. On certain roadway segments listed in the DEIR, impacts were found to be significant and unavoidable. See also response to comment #289-18.

Response to Comment #289-76:
While it would be speculative to state what development would occur along McCray Road in Cloverdale, cultural deposits and artifacts of Native Americans in this area would be considered and protected by policies of the Draft GP 2020. As described on page #4.10-17 of the DEIR, Policy OSRC-19f, now OSRC-19k, would continue to require the County to confer with the Northwest Information Center (NWIC) for discretionary development proposals in order to determine if the site might contain such archeological deposits. If the NWIC responds with a request for an archeological or paleontological survey, PRMD usually requests it from the project applicant. When the survey is prepared, the archeologist and / or paleontologist typically include recommendations that in the event resources are discovered during ground disturbance, work is to stop, and that the archeologist is consulted and their recommendations are followed. Furthermore, project level environmental review (e.g., EIRs), if required, would further evaluate project specific impacts to cultural resources and recommend appropriate mitigation.

Response to Comment #289-77:
See Master Response A (DEIR Review Period).

Response to Comment #289-78:
See Master Response E (Extent of Significant Impacts).

Response to Comment #290-01:
As noted in response to comment #233-01, the projections for future vineyard development relied upon past trends over an extended period of time that encompasses a range of economic cycles.

Response to Comment #290-02:
According to the Agricultural Commissioners office, there are no comprehensive data available to quantify the amount and location of erosion and/or sedimentation resulting from any particular land uses in Sonoma County. In fact, one of the primary purposes of the RWQCB's TMDL program is to provide a comprehensive assessment of the sources of pollutants such as sediment in each watershed.

Response to Comment #290-03:
Mining operations are included in the land uses and development allowed under Draft GP 2020. As a result, the impacts of mining operations are addressed throughout the topical sections of the DEIR and under Section 6.2 (Cumulative Impacts). However, these impacts are addressed at a general, countywide, level of detail appropriate for a General Plan Program EIR. The specific impacts of mining operations are addressed as part of each mining project submitted to the County for review. Programmatic impacts of all mining operations are addressed in the Aggregate Resources Management Plan and its EIR. See also response to comment #289-10.

Response to Comment #290-04:
Comment noted. The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #290-05:
See Master Response N (Climate Change).

Response to Comment #290-06:
See Master Response N (Climate Change).

Response to Comment #290-07:
Several policies in the Draft GP 2020 would serve to identify and protect sensitive resources, such as wetlands. Policy OSRC-7b requires a site assessment and adequate mitigation for discretionary projects, which would include consideration of potential impacts of development on wetlands. Policy OSRC-7r calls for developing comprehensive programs for preservation and restoration of freshwater marsh habitat throughout the County, including Atascadero Marsh. Policy OSRC-7i calls for a comprehensive habitat identification and mapping program for use in future policy considerations.

Response to Comment #290-08:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Draft GP 2020 policies AR-5a and AR-5b have been revised and no longer express a percentage related to agricultural processing.

Response to Comment #290-09:
See response to comment #251-08.

Response to Comment #290-10:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. Draft GP 2020 Policies AR-5a and AR-5b have been revised and no longer express a percentage related to agricultural processing. The cumulative impacts of all land uses and development under Draft GP 2020, including agricultural processing, are addressed in Section 6.2 (Cumulative Impacts). See also response to comment #270-13.

Response to Comment #290-11:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 Land Use Element Policy LU-6d has been revised to allow for expansion of agricultural uses in the Agriculture and Residential Zoning District.

Response to Comment #290-12:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 Land Use Element Policy LU-6d has been revised to allow for expansion of agricultural uses in the Agriculture and Residential Zoning District.

Response to Comment #290-13:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 Agricultural Resources Element includes Policy AR-6h establishing provisions for farm homestays.

Response to Comment #290-14:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #290-15:
See response to comment #254-05.

Response to Comment #290-16:
See response to comment #254-05 and Master Response L (Airport Master Plan).

Response to Comment #290-17:
See response to comment #254-05.

Response to Comment #290-18:
See response to comment #247-01.

Response to Comment #290-19:
See responses to comment letter #220 and Master Response K (Agricultural Traffic).

Response to Comment #290-20:
See response to comment letter #280 and Master Response K (Agricultural Traffic).

Response to Comment #290-21:
The DEIR fully analyzes traffic impacts that may result from Draft GP 2020. Noise analysis and data collection in the DEIR follows California Government Code and Sonoma County General Plan policies. A weighted 24-hour noise measurement with adjustments for nighttime noise is required. To avoid under estimation of intermittent noise sources, the DEIR describes noise exposures from non-transportation sources in terms of the observed or predicted maximum as well as average noise level. See also response to comments #224-03, #224-04, #224-05, and #224-06.

Response to Comment #290-22:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #290-23:
See Master Response L (Airport Master Plan). The noise and safety impacts of the Draft GP 2020 Air Transportation Element are addressed in Section 4.4 (Noise) and Section 4.2 (Transportation) of the DEIR.

Response to Comment #290-24:
See Master Response D (Effectiveness of Mitigation Measures) and Master Response E (Extent of Significant Impacts).

Response to Comment #290-25:
See response to comments #266-07, #266-28, and #266-47 through #266-51.

Response to Comment #290-26:
The cumulative impacts of Draft GP 2020 are addressed in Section 6.2 (Cumulative Impacts) of the DEIR. See responses to comments #277-02 and #277-04 and Master Response K (Agricultural Traffic).

Response to Comment #290-27:
See response to comment #290-26.

Response to Comment #290-28:
See response to comment #243-02 and Master Response E (Extent of Significant Impacts).

Response to Comment #290-29:
See response to comment #243-03.

Response to Comment #290-30:
See Master Response D (Effectiveness of Mitigation Measures) and Master Response E (Extent of Significant Impacts).

Response to Comment #290-31:
See response to comment #233-01.

Response to Comment #290-32:
See response to comment #233-02.

Response to Comment #290-33:
The comment pertains to a policy issue of Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration. Section 4.6 (Biological Resources) of the DEIR discusses the importance of wetlands from a biological perspective as well as the importance of riparian corridors for numerous reasons beyond their role in reducing erosion and sedimentation. The existing VESCO ordinance was not only considered in the DEIR but was also identified in the discussion in Section 4.5 (Hydrology and Water Resources). See also response to comment #233-05.

Response to Comment #290-34:
See response to comment #233-05.

Response to Comment #290-35:
See response to comment #233-06.

Response to Comment #290-36:
See response to comment #233-06.

Response to Comment #290-37:
Comment noted.

Response to Comment #290-38:
See Master Response G (Recirculation).

Response to Comment #290-39:
See Master Response J (Buildout).

Response to Comment #291-01:
As noted by the comment, the Draft GP 2020 was limited to a policy review of issues selected by the Board of Supervisors based upon input from the community at large and the Citizen's Advisory Committee. Section 3.2 (Project Description) of the DEIR, under "Project Objectives," described these

issues. As a result, the Project Objectives place a limitation on the range of policy options that are available to the County in order to mitigate project impacts, particularly where changes in land use designations might be involved. Nonetheless, as required by CEQA, the DEIR evaluates the impacts of Draft GP 2020 compared to the existing conditions. See also Master Response H (Range of Alternatives) and Master Response I (Land Use Changes).

Response to Comment #291-02:
See Master Response B (Jurisdiction).

Response to Comment #291-03:
In response to the comment, the following is added to page #4.9-59 of the DEIR as a new paragraph under "State Regulations":

> "In 1988 the State Legislature enacted the "Leroy F. Greene School Facilities Act of 1998", also known as SB 50, which made major changes in the manner in which cities, counties, and school districts can seek to obtain mitigation for the impacts on schools caused by new development. The legislation resulted in a bond approved by voters in 1998 which changed the law by (1) requiring local school districts to fund at least 50% of the cost of new school construction, (2) eliminating the ability of local agencies to impose school impact fees in excess of state-mandated limits except under specified conditions, and (3) suspending for at least eight years the authority of local agencies to disapprove quasi-legislative projects such as General Plan Amendments or Rezonings on the basis of inadequate school facilities."

Response to Comment #291-04:
See Master Response F (Explanation for Lack of Mitigation Measures) and Master Response E (Extent of Significant Impacts).

Response to Comment #291-05:
Comment noted. See response to comments #7-01 through #7-48 regarding responses to comments by the Sonoma County Water Agency.

Response to Comment #291-06:
The comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. The comment has been forwarded to the decision making bodies for consideration.

Response to Comment #291-07:
Program 8 in the Agricultural Resources Element establishes a comprehensive event coordination program that provides for monitoring and scheduling of special events so as to minimize the adverse cumulative impacts of such uses, particularly in areas of concentration.

Response to Comment #291-08:
Comment noted. The Draft GP 2020 policies regarding groundwater management are contained in the Draft Water Resources Element.

Response to Comment #291-09:
See Master Response N (Climate Change).

Response to Comment #291-10:
See Master Response P (Urban Water Management Plans).

Response to Comment #291-11:
While the comment may be correct in stating that the Draft GP 2020 may result in economic impacts, impacts analyzed under CEQA must be related to a physical change in the environment. Economic and social effects are not considered environmental impacts under CEQA. These effects need to be considered in EIRs only if they would lead to a physical environmental impact or if they are a factor in

determining whether a physical impact is significant. As discussed in section 15131of the CEQA Guidelines, the evaluation of economic or social effects is generally treated as optional; agencies (such as Sonoma County) may, but are not required to, evaluate them. Agencies sometimes do include an analysis of economic or social effects of a proposed project. To the extent economic factors are determined to render a particular mitigation measure or alternative infeasible, the findings made by the Board of Supervisors at the time of project approval would include a discussion of those economic factors.

Response to Comment #291-12:
As with any projections into the future, whether related to wineries, grape production, housing, or jobs, there is an element of guesswork. The projection for future housing units in Alexander Valley is related to the land use designations in that area. Although the wine grape economy has been and continues to be strong in this area, there is a relatively higher potential for large lot residential development than has taken place in recent years. This development could increase as the value of property for residential use continues to grow. If less development occurs than is projected, the impacts from development would be correspondingly less than described in the DEIR.

Response to Comment #291-13:
The comment pertains to a policy issue of the Draft GP 2020 and not to the adequacy of the DEIR. The Draft GP 2020 recognizes the need for bank stabilization measures. For example, Section 3.3 of the Draft GP 2020 Public Safety Element includes policies suggesting use of structural flood mitigation measures where necessary.

Response to Comment #291-14:
The comment pertains to the Board of Supervisor's screening criteria regarding proposed land use plan amendment requests as part of Draft GP 2020 and not the adequacy of the DEIR. See also Master Response I (Land Use Changes).

Response to Comment #291-15:
Traffic calming as it is meant in the Draft GP 2020 Circulation and Transit Element is described in Policy CT-3d.

Response to Comment #291-16:
Comment noted. While growth in Sonoma County has recently slowed, demand for travel exceeds the overall road capacity in the Highway 101 corridor. This demand has been created by population growth, a growing imbalance between wages and housing prices, and insufficient capacity improvements projects within the 101 corridor. Traffic modeling used by the DEIR assumes that drivers prefer routes that are forecast to have the highest average travel speed between nodes. Because overall demand for north-south travel already creates significant congestion on most routes within the Highway 101 corridor, traffic is predicted to shift from local streets and roads to Highway 101 once additional lanes are added. However, two additional lanes on Highway 101 will not create enough additional north-south capacity along the Highway 101 corridor to accommodate existing or future demand. Congestion will remain significant on Highway 101 between Airport Boulevard and Novato, and capacity improvements to Highway 101 identified in Draft GP 2020 are not anticipated to reduce congestion to a less than significant level.

Response to Comment #291-17:
See response to comment #237-144.

Response to Comment #291-18:
See response to comment #237-11. The DEIR assumes that Draft GP 2020 will be carried out in accordance with the policies and programs included in the Plan.

Response to Comment #291-19:
See response to comment #237-11. The DEIR assumes that all policies and programs in Draft GP 2020

will be carried out. Of course, as the future unfolds, it is not possible to predict what might happen with federal, state and local budgets, funding, and staff resources. For this reason, Draft GP 2020 includes regular and ongoing monitoring of plan implementation and progress. One of the reasons why there are many impacts that are significant and unavoidable is the uncertainty when policy and program mitigation measures will be successfully completed.

Response to Comment #291-20:
See response to comment #237-18 and #237-19.

Response to Comment #291-21:
Future growth in the rural unincorporated areas is limited by many policies. In addition to public service and infrastructure policies (i.e. future roads and public sewer and water systems), these include low residential densities, open space protection, agricultural protection, etc. ACC's, since they simply recognize existing lots created before the advent of General Plan and zoning regulations, may result in development that is inconsistent with these policies. However, package treatment plants do not directly result in growth that is inconsistent with land use policy. Instead, the use of these plants may enable some allowed uses that otherwise could not take place if standard septic systems were the only wastewater treatment method available. See also response to comment #237-20 and #237-24.

Response to Comment #291-22:
See response to comment #237-33.

Response to Comment #291-23:
See response to comment #237-35.

Response to Comment #291-24:
See response to comment #237-36.

Response to Comment #291-25:
See response to comment #237-39.

Response to Comment #291-26:
See response to comment #237-44.

Response to Comment #291-27:
See response to comment #237-88.

Response to Comment #291-28:
See responses to comments #237-101 and #237-121 and Master Response N (Climate Change).

Response to Comment #291-29:
See response to comment letter #7, Master Response P (Urban Water Mangement Plans), Master Response Q (SCWA Water Project), Master Response R (Groundwater Management), and Master Response S (Water Supply). The impacts of Draft GP 2020 land uses and development on water resources are addressed in Section 4.5 (Hydrology and Water Resources) and Section 4.9 (Public Services).

Response to Comment #291-30:
See response to comment #237-92 and #237-132. See also Master Response P (Urban Water Management Plans).

Response to Comment #291-31:
The impacts of recycled wastewater use are included in the analysis of water quality impacts related to wastewater disposal in Section 4.5 (Hydrology and Water Resources) of the DEIR, under Impact #4.5-4.

Response to Comment #291-32:
See Master Response N (Climate Change).

Response to Comment #291-33:
The opening paragraph of Section 3.1 (Project Location) is revised as follows:

"Highway 101 is the primary north-south route…following the coastline and **Highway 12 and** Highway 116 traversing the County…"