



COUNTY OF SONOMA

575 ADMINISTRATION
DRIVE, ROOM 102A
SANTA ROSA, CA 95403

SUMMARY REPORT

Agenda Date: 8/13/2024

To: Sonoma County Board of Supervisors

Department or Agency Name(s): Permit and Resource Management Department

Staff Name and Phone Number: Nathan Quarles, (707) 565-1146

Vote Requirement: Majority

Supervisorial District(s): Countywide

Title:

Local Agency Management Program and Onsite Wastewater Treatment System Regulations and Technical Standards Revisions

Recommended Actions:

Adopt a Resolution approving revised Onsite Wastewater Treatment System Regulations and authorize the Director of Permit Sonoma to submit a revised Sonoma County Local Agency Management Program and supporting documents to the North Coast Regional Water Quality Control Board for approval.

Executive Summary:

State law mandates the State Water Resources Control Board (State Water Board) adopt standards for regulation of onsite waste treatment systems (OWTS) commonly known as septic systems. The State Water Board has complied with state law through the adoption of the State's OWTS Policy. The State's OWTS Policy requires local jurisdictions to submit OWTS programs, or a Local Agency Management Program (LAMP), to the appropriate Regional Water Board (RWB) for review and approval.

In June 2019 Permit Sonoma staff presented a LAMP to the Board of Supervisors seeking authorization to submit the LAMP to the local RWB. The Board of Supervisors directed the submittal of the LAMP and the OWTS Manual. Staff submitted the LAMP and OWTS Manual to the RWB in August 2019. Subsequently, the RWB reviewed the submittal and required revisions.

In the intervening years, staff have made the necessary revisions. Additional edits are being proposed for the OWTS Manual which include clarifications, filling gaps in the regulations, and adding regulations to address stream or river impairments.

With these edits, staff are seeking the Board of Supervisors authorization to submit the revised LAMP (Attachment A) and OWTS Manual (Attachment B) as the County's OWTS Program to the RWB for approval.

Regulations for septic systems assist the community by providing a consistent framework for the design and construction of septic systems and assists in protecting public health and the environment.

On June 26, 2024, Permit Sonoma received a comment letter co-signed by the North Bay Association of Realtors, the Sonoma County Farm Bureau, the Engineering Contractor's Association, the North Bay

Leadership Council and the Sonoma County Alliance Political Action Committee (Attachment G). Several of these recommendations have been incorporated in the OWTS Manual update including standards based on when the primary system was designed, annual review of the OWTS Manual, and revisions to the number of required hydrometer tests. The remainder of the recommendations would require further study, and likely resource allocation, but Permit Sonoma is generally supportive of the recommendations to implementing a financial assistance program, digitizing historic records, reassessing waiver prohibition areas, and interim standards where a community system is proposed.

Discussion:

Background

In 2000, the California Legislature passed Assembly Bill 885 amending Water Code section 13290 requiring the State Water Board to adopt regulations or standards for the permitting and operation of OWTS, commonly known as septic systems.

On June 19, 2012, the State Water Board adopted Resolution No. 2012-0032 adopting the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (OWTS Policy). On April 18, 2023, the State's OWTS Policy was re-adopted by the State Water Board.

The OWTS Policy establishes a statewide, risk-based, tiered approach for the regulation and management of OWTS to protect water quality and public health. Regional Water Quality Control Boards (RWBs) are responsible to implement the OWTS Policy. The OWTS Policy requires local jurisdictions to submit a LAMP to the appropriate RWBs, which in Sonoma County is the North Coast Regional Water Quality Control Board (by virtue of an agreement with the San Francisco Bay Regional Water Quality Control Board). The LAMP should demonstrate how the local septic program meets the objectives of the State's OWTS Policy.

The OWTS Policy establishes five risk-based tiers from Tier Zero to Tier Four. Tier Zero is for existing and properly functioning systems. Tier One establishes statewide standards for new and replacement systems. Tier Two allows local agencies to establish different standards than Tier One, provided they create comparable protections. Tier Three establishes standards for impaired water bodies. Tier Four sets standards for systems in need of corrective actions.

Overview of Sonoma County Response to OWTS Policy

With significant community input, Permit Sonoma has created a Tier Two LAMP for review and approval by the RWB. Permit Sonoma has discussed this item with the Board in several meetings. Board direction and subsequent implementation led to robust public involvement, hundreds of comments, and edits to numerous provisions of the OWTS Manual. Permit Sonoma presented the third version to the Board on May 21, 2019. Despite the public input, several issues remained for resolution. On May 21, 2019, staff identified these issues in a report to the Board. The Board provided direction on each of the topics as discussed below.

On June 11, 2019, the Board authorized the submittal of a LAMP and supporting documents, primarily the County's OWTS Manual, to the RWB for consideration.

On June 20, 2019, staff submitted a LAMP and supporting documents to the RWB for their consideration.

In a November 25, 2019, letter (Attachment C), the North Coast RWB staff identified 21 issues that RWB asserted needed to be addressed before the LAMP could be approved. The most significant among these issues was the North Coast RWB's determination that replacing any part of the dispersal system triggered new standards for "replacement" rather than a repair permit. The RWB stated:

These proposed requirements, which would authorize replacement or repair of up to 50 percent of an existing dispersal system, are not consistent with the OWTS Policy's definition of a Replacement OWTS. The County must provide a technical justification why replacement of a portion of an existing dispersal system is consistent with the OWTS Policy and may be authorized in an approved LAMP.

In subsequent communications, staff provided this technical justification, which is that repair permits for a portion of the dispersal system can facilitate expedited repairs and will not permanently grandfather systems that need to be replaced. RWB staff have now informally concurred that a repair permit can be issued when 25% or less of the dispersal system is being replaced.

Based on feedback from the community, Board and RWB staff, staff have prepared a revised LAMP and associated documents for consideration.

Community Engagement

In 2021, staff worked with a five-to-six-member technical advisory group made up of several design professionals and several Permit Sonoma staff members. This effort resulted in a revised draft of the OWTS Manual.

In 2022, staff brought the revised manual to the Land Use Advisory Panel (LUAP). LUAP members provided numerous comments and staff reviewed and provided responses. Staff then met with LUAP members in mid-2023 and held weekly meetings starting in late 2023 and into 2024 to discuss their concerns and to seek compromises where appropriate.

Staff also received comments from the Lower Russian River Citizen's Advisory Group (CAG), through the Board of Supervisor's OWTS Ad Hoc committee. Staff provided responses to the CAG's comments to the OWTS Ad Hoc and CAG. Staff also met with CAG members to discuss their concerns. These efforts resulted in OWTS Manual v8.0.

In May 2024, staff released version 8.0 for public review and comment.

Public meetings have continued with the general public and specific groups such as the Sonoma County Farm Bureau, North Bay Association of Realtors, and citizen groups. Proposed edits to OWTS Manual v8.0 based on these meetings are presented in OWTS Manual v8.0 Errata (Attachment D).

LAMP / OWTS Manual Overview

OWTS Manual changes range from technical clarifications to adding new system types. Below outlines the main issues with options for consideration.

Reserve Replacement Systems / Building Permit Thresholds

Reserve areas are critical to sustainable OWTS because they allow for rotation of wastewater to a new field so the old one can rest and recover. The policy question is: When should reserve areas be required?

California Plumbing Code Section H 101.6 Design provides that,

“Private sewage disposal systems shall be so designed that additional seepage pits or subsurface drain fields, equivalent to not less than 100 percent of the required original system, shall be permitted to be installed where the original system cannot absorb all the sewage. No division of the lot or rection of structures on the lot shall be made where such division or structures impairs the usefulness of the 100 percent expansion area.

As a compromise to the plumbing code, staff propose the reserve area be required if the proposed development, on a parcel with existing development, creates more than 50% encumbrance. Development within an existing encumbered area does not increase encumbrance of the parcel.

For proposed development such as, new structure(s) on an undeveloped parcel, reconstruction of a main residence, construction of a new primary residence or construction of an accessory dwelling unit (excluding a bedroom swap, for example) where new dispersal area is necessary, the manual mandates a reserve replacement area.

If a reserve area is used, the manual does not require a new reserve area. The concept is to rotate primary and reserve areas, not to replace them when used.

Separation Distances for Mounds and At-Grade OWTS

OWTS need separation for proper function and protection of adjacent soil for future use. Without separation standards, there can be confusion and disagreement between staff and system designers. The OWTS Manual proposes minimum setbacks for these system types to ensure proper functionality of future systems and reduce delays in the plan review process.

For Mound OWTS, the manual provides for the toe of primary OWTS sand layer and the toe of the second or reserve OWTS sand layer to abut.

At-Grade OWTS, the manual provides for the toe of the primary OWTS fill layer and the toe of the second

or reserve OWTS fill layer to abut.

These systems have internal distances from the point of dispersal to edge of the sand toe (Mounds) and to the edge of fill (At-Grades) that allows for abutting of the external edges.

Setbacks for aggregate elements of these systems can be reduced if the design and site evaluation demonstrate no horizontal effluent movement or hydraulic mounding.

State OWTS Policy Tier 3 / TMDL Compliance for Impaired Water Bodies

There are three water bodies within Sonoma County designated as impaired due to pathogens and/or nutrients. These are the Russian River, the Petaluma River, and Sonoma Creek. Staff propose OWTS Manual Section 19 to address these impaired water bodies.

The State's OWTS Policy provides three approaches for water bodies that are designated as impaired. These options include implementing an approved TMDL Action Plan, implementing local requirements known as Special Provisions, or implementing the requirements within the State OWTS Policy Tier 3 section 10.

Petaluma River and Sonoma Creek Watersheds

The San Francisco Bay RWB has adopted TMDLs for the Petaluma River and Sonoma Creek. Staff recommends implementation of TMDL Action Plans for these watersheds because they are easier to achieve than the OWTS Policy standards or Special Provisions.

Russian River Watershed

A Russian River TMDL and TMDL Action Plan do not exist currently for the Russian River Watershed. As such implementing a TMDL Action Plan is not an available option. The remaining two approaches are the Tier 3 standards set by the State or Special Provisions created by the County.

This OWTS Manual proposes Special Provisions, within 600 feet of the impaired segments of the Russian River, that require OWTS to have supplemental treatment and/or enhanced dispersal systems. The proposal also has an exception for either three feet or two feet of good soil depending on the distance from the impaired water body along with a reduced sewage application rate.

Other Revisions in the proposed OWTS Manual

- Reserve replacement areas. The manual clarifies that the use of a vetted reserve replacement area does not require another replacement area. (Section 4.3)

- Easements. Easements are allowed where parcel abut. However, easements to a parcel that is one or more parcels removed from the subject parcel are not allowed. (Section 4.5)
- OWTS replacement under a repair permit. OWTS Manual v7.0 authorized an OWTS repair permit to include up to 50% of a replacement system. As noted above, the North Coast RWB denied the prior LAMP due to this provision. The proposed manual proposes an OWTS repair permit to include up to 25% of a replacement system. (Section 4.10)

Variations. Many variations are “tried and true” and were standardized in the current OWTS Manual Section 17 Table 1. These are proposed to be moved to the relative sections as exceptions. Others are presented in Section 4.16. This approach allows the “variance” to be accepted as part of the OWTS design versus requiring a separate “variance” application. (Section 4.16; Section 17)

- Shifting site evaluation work to designers. Site evaluations take three forms: soil depth and type, percolation rate, and groundwater elevations. The concept is to shift this work to solely design professionals, freeing up staff to focus on plan reviews. Revisions were needed to eliminate applications for site evaluations, to require the site evaluation information be submitted in the OWTS Design Report when the OWTS application is submitted, and clarification on how to document the site evaluation information. (Section 7)
- Site Evaluation Area and Site Evaluation Radius. Each site evaluation location has an effective radius. Combining these areas creates a Site Evaluation Area where the OWTS can be located. The effective radii for each type of site evaluation are proposed to be 50 feet for soil evaluations, 50 feet for groundwater elevations, and 25 feet for percolation tests. (Section 7-13).
- Drip Systems. The current OWTS Manual provides for sub-surface drip OWTS. The revised manual proposes an “at-grade” drip system if there is a minimum of 24 inches of good soil below and a minimum of six inches of cover soil. (Section 13.5)

- Operational Monitoring Program. The current OWTS Manual requires non-standard OWTS to be in the Operational Monitoring (OPR) Program. In 2023, the County revised this program to only require OWTS with a supplement treatment unit be placed in the OPR program. The proposed OWTS Manual catches up to this change. (Section 14)
- State OWTS Policy Tier 3. Section 19 has been added to address impaired water bodies, TMDLs and Advanced Protection Management Programs. (Section 19)
- State OWTS Policy Tier 4. Section 20 has been added to address OWTS that need corrective action. (Section 20)
- Cesspool Conversion. A subsection of Section 20 allows for the conversion of cesspools. Cesspools are prohibited by the RWB's and the State OWTS Policy. The County provides for a cesspool conversion that waives the typical site evaluation requirements to encourage removing cesspools from the landscape. As part of Section 20, a cesspool conversion does not authorize new or additional development or re-construction of existing structures. (Section 20).
- Waterless Toilets. In 2023, the County revised section Sonoma County Code section 26 to allow for non-flush toilets (waterless toilets). The proposed OWTS Manual catches up to this change. (Section 21)
- OWTS not authorized by the State's OWTS Policy. The proposed OWTS adds a section to provide direction if a OWTS does not meet the minimum standards of the OWTS Policy. (Section 22)

Revisions in Response to Public Input

The proposed manual has garnered significant interest and comment. As with other construction regulations, staff will track clarifications, mistakes, omissions, and especially innovations for modifications to the manual. Staff will continue to track changes and review them with LUAP and the technical advisory committee.

Specific comments from and responses to a June 26, 2024, comment letter co-signed by the North Bay Association of Realtors, the Sonoma County Farm Bureau, the Engineering Contractor's Association, the North Bay Leadership Council and the Sonoma County Alliance Political Action Committee are summarized below.

The comment letter provided a recommendation regarding which standards to use when vetting reserve areas: today's standards or the standards in place when the primary septic system was designed. The recommendation was to use the standards in place when the primary system was designed. The recommendation is proposed to be incorporated into the revised OWTS Manual.

The comment letter recommends the County pursue financial assistance in the form of a low interest low program for repairs and replacement systems. Permit Sonoma could assist with implementation of a new program as resources become available with Board direction.

The comment letter recommends the OWTS Manual be revisited in one year. Permit Sonoma agrees with the recommendation but recommends even more frequent assessment of the OWTS Manual with quarterly amendments and monthly discussions with the Land Use Advisory Panel.

The comment letter recommends extending the use of neighboring groundwater data to soils and percolation test. Staff does not concur. Neighboring data is applicable to groundwater as the groundwater gradient and direction does not vary greatly over distances. However, in our experience soil depth, type of soil and percolation rates do vary over much shorter distances.

The comment letter recommends the reduction in the number of hydrometer tests. The number of hydrometer tests was increased due to staff being removed from the on-site soil evaluation process. The manual is now proposed to be revised to require hydrometer tests from one soil evaluation location, provided the one location is representative of the soil where the system is proposed.

Three additional items were discussed: retention and use of data; waiver prohibition areas; and interim standards where a community system is proposed. Permit Sonoma agrees with all these recommendations. Permit Sonoma would need to develop staffing requirements, cost estimates, time schedules and the seek funding to address these topics.

Future OWTS Manual Amendments

Staff and LUAP members have created a list of topics that need to be created and added to the manual (Attachment E). A few of the topics include:

- Contents of an adequate slope stability report/study
- Siting of new dispersal system over existing systems

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- Lift station standards
- Leaching Beds vs Seepage Pits (add leaching bed as a system type)

Staff will work with a subset of the LUAP membership to create and refine OWTS Manual sections to address these, and other, topics. Each topic or section would be presented to the Director of Permit Sonoma who would then utilize Sonoma County Code section 24-31.5 as the process for amending the OWTS Manual.

CEQA

The proposed adoption of the OWTS Manual and submission of the LAMP to RWQCB are actions that are categorically exempt from CEQA under CEQA Guidelines 15061(b)(3); 15307, and 15308.

Prior Board Actions:

06/04/2019: Board discussion of LAMP and OWTS Manual; provided direction to eliminate the requirement to evaluate reserve areas for building projects that do not increase wastewater flow.

05/21/2019: Board discussion of LAMP and OWTS Manual; provided direction as to which policy options to implement; provided direction on revisions to specific OWTS Manual provisions; provided direction to initiate a composting toilet pilot project with Regional Parks; provided direction to initiate a funding mechanism for septic system upgrades with assistance from other county departments; provided direction to evaluate “stock plans” as standardized septic designs; provided direction to provide an informational status report within a year of implementation of the OWTS Manual.

05/22/2018: Board discussion of LAMP and OWTS Manual; provided direction to request a six-month extension from the RWB, to conduct additional community outreach and solicit additional feedback from the community, and to then revise the septic policies in response and to return to the Board within the six-month extension time period.

05/10/2016: Board authority to submit LAMP and associated documents to the RWB

1995: Ordinance No. 4906, Section 5(B)

FISCAL SUMMARY

Not Applicable

Narrative Explanation of Fiscal Impacts:

There will be no fiscal impacts to the County.

Staffing Impacts:

Not Applicable

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Narrative Explanation of Staffing Impacts (If Required):

There are no staffing impacts related to this item.

Attachments:

Attachment A-Local Agency Management Program

Attachment B-Onsite Wastewater Treatment System Regulations and Technical Standards

Attachment C-North Coast Regional Water Quality Control Board letter (November 25, 2019)

Attachment D- OWTS Manual v8 Errata Sheet July 2024

Attachment E- OWTS Manual v8 Future Amendments July 2024

Attachment F-Proposed Resolution Adopting OWTS Manual Revisions

Attachment G-NORBAR SCOWTS Letter

Related Items “On File” with the Clerk of the Board:

SWRCB OWTS Policy

Sonoma Creek TMDL Implementation Plan