

5 Existing Regulatory Framework

A wide range of overlapping laws, regulations, policies, plans, and programs are administered by federal, state, and local agencies to regulate the operation, maintenance, and monitoring of OWTS in California. This section presents a summary of those regulations.

5.1 General Federal Plans, Policies, Regulations, and Laws

The U.S. Environmental Protection Agency (USEPA) is the lead federal agency responsible for managing water quality. The Federal Water Pollution Control Act of 1972 (also known as the Clean Water Act [CWA]) and its amendments and the Safe Drinking Water Act are the primary federal law that govern and authorize EPA's actions to control water quality. Elements of the CWA that address water quality and are relevant to the regulation of OWTS are discussed below.

5.1.1 Federal Clean Water Act - Water Quality Control Plans and Standards

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. These water quality standards are contained in the water quality control plans (basin plans) of each of California's Regional Water Quality Control Boards.

Water quality standards for water consist of beneficial uses, water quality objectives to protect those uses, and an antidegradation policy that requires that, in water bodies with water quality better than water quality objectives, quality must be maintained at the higher water quality level. Where multiple uses for the water exist, water quality standards must protect the most sensitive use. In California, the State Water Board and nine regional water boards are responsible for identifying beneficial uses and adopting applicable water quality objectives, although USEPA has oversight and promulgation authority as well.

5.1.2 Federal Clean Water Act Antidegradation Policy

The federal government established an antidegradation policy in 1968 (40 CFR 131.12). The policy is designed to protect existing beneficial uses of water and water quality. The federal policy directs states to adopt statewide policies that include the following primary provisions:

- ▶ existing instream uses and the water quality necessary to protect those uses shall be maintained and protected;
- ▶ where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development; and
- ▶ where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

5.1.3 Federal Clean Water Act - Section 303(d) Impaired Waters List

As part of the State Water Board's mandate for creating statewide standards for OWTS, the State Water Board must establish requirements for OWTS adjacent to water bodies listed pursuant to CWA Section 303(d). Under Section 303(d) of the CWA, each state is required to develop a list of water bodies, or segments of water bodies that do not attain water quality objectives for specific pollutants even after point-source dischargers (municipalities and industries) have installed the minimum required levels of pollution control technology. Section 303(d) requires that, for each water body listed, the states develop a total maximum daily load (TMDL) for each of the listed pollutants.

A TMDL is a calculation of the maximum amount of a pollutant that the water body can receive and still be in compliance with water quality standards. The regional water boards allocate portions of each pollutant's TMDL to its determined source or sources (a waste load allocation). The TMDL, therefore, consists of the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the state has designated, such as swimming, drinking, and protecting wildlife habitat. It also must account for seasonal variation in water quality.

The process of developing TMDLs involves several steps, including: describing the water quality problem addressed by the TMDL; detailing the sources of pollution; outlining pollution prevention, control, or restoration actions and identifying who is responsible for implementing these actions; and ultimately amending the relevant water quality control plan (basin plan). USEPA must either approve a TMDL prepared by the regional water board or, if it disapproves the proposed TMDL, issue its own. NPDES permit limits for listed pollutants in a 303(d)-listed area must be consistent with the waste load allocation prescribed in the applicable TMDL.

After implementation of a TMDL, it is anticipated that the problems that led to placement of a water body on the Section 303(d) list would be remediated. The Section 303(d) list of impaired water bodies in California was last updated in 2010. Table 4-10 identifies section 303(d)-listed water bodies in California that are identified as being impaired by nutrients and/or pathogens; **Table 4-11** identifies water bodies where OWTS have been identified as contributing to the impairment.

5.1.4 Safe Drinking Water Act

Under the Safe Drinking Water Act (Public Law 93-523), passed in 1974, USEPA regulates contaminants of concern in the domestic water supply. Contaminants of concern relevant to the domestic water supply are defined as those that pose a public health threat or alter the aesthetic acceptability of the water (e.g., odor, taste, color). USEPA establishes primary and secondary maximum contaminant levels that regulate these types of contaminants. The law, amended most recently in 1996, requires many actions to protect drinking water and its sources, including both surface waters (e.g., rivers, lakes) and groundwater (e.g., drinking water wells).

Additionally, a federal Underground Injection Control (UIC) program was established under the provisions of the Safe Drinking Water Act. Under this program, wells that inject waste into the ground are regulated. Some of these wells (Class V wells) include OWTS. States are not delegated oversight of this portion of the program. As such, the USEPA is the regulatory agency for that federal program.

5.1.5 Federal Farmland Protection Policy Act

The federal Farmland Protection Policy Act (FPPA) was enacted to minimize federal contributions to the conversion of farmland to nonagricultural uses by ensuring that federal programs are administered in a manner compatible with state government, local government, and private programs designed to protect farmland. The FPPA established the Farmland Protection Program (FPP) and the Land Evaluation and Site Assessment (LESA) system.

The FPP is a voluntary program that provides funds to help purchase development rights to keep productive farmland in agricultural uses. The LESA system helps state and local officials make sound decisions about land use and accurately ranks land for suitability and inclusion in the FPP. LESA evaluates several factors, including soil potential for agriculture, location, market access, and adjacent land use. These factors are used to rank land parcels for inclusion in the FPP based on local resource evaluation and site considerations. The LESA system classifies land based on ten soil and climatic characteristics. The California Department of Conservation (CDC) augmented that program in 1980 by initiating a system of inventorying, mapping, and monitoring the acreage of farmland in California. The CDC inventory system was designed to document how much agricultural land in California was being converted to nonagricultural land or transferred into Williamson Act contracts.

5.1.6 Clean Air Act

Air quality in California is highly regulated. At the federal level, the Clean Air Act (CAA) required USEPA to establish primary and secondary National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. The CAA also required each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The CAA also required USEPA to promulgate national emissions standards for hazardous air pollutants (NESHAP). The CAA required USEPA to promulgate vehicle or fuel standards containing reasonable requirements that control toxic emissions, addressing at a minimum benzene and formaldehyde.

5.1.7 Hazards

At the federal level, the principal agency regulating the generation, transport, treatment, storage, and disposal of hazardous substances is the USEPA, under the authority of the Resource Conservation and Recovery Act (RCRA). Individual states may implement their own hazardous substance management programs as long as they are consistent with, and at least as strict as, RCRA. USEPA must approve state programs implementing the RCRA requirements.

USEPA regulates hazardous substance sites under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Applicable federal regulations are outlined primarily in Titles 29, 40, and 49 of the Code of Federal Regulations (CFR).

The Occupational Safety and Health Administration (OSHA) is the agency responsible for ensuring worker safety. OSHA sets federal standards for training in the work place, exposure limits, and safety procedures in the handling of hazardous substances. OSHA also establishes criteria by which each state can implement its own health and safety program.

5.2 General State Plans, Policies, Regulations, and Laws

5.2.1 Porter-Cologne Water Quality Control Act of 1969

California's Porter-Cologne Water Quality Control Act (Porter-Cologne Act), part of the California Water Code, is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, California must adopt water quality policies, plans, and objectives that protect the state's waters for the use and enjoyment of the people. The act sets forth the obligations of the State Water Board and the nine regional water boards pertaining to the adoption of basin plans and establishment of water quality objectives.

5.2.2 State Water Resources Control Board

The State Water Resources Control Board establishes policy for the nine Regional Water Quality Control Boards. The State Water Board has primary responsibility for overseeing all the state's water quality regulations and standards, including water quality control plans and relevant water quality objectives and standards.

5.2.2.1 State Antidegradation Policy (Resolution 68-16)

State Water Board Resolution No. 68-16 contains the state Antidegradation Policy, which is titled "Statement of Policy with Respect to Maintaining High Quality Waters in California." The State Water Board has interpreted Resolution No. 68-16 to incorporate the federal Antidegradation Policy where the federal policy applies (Water Quality Objective 86-17). The state Antidegradation Policy applies more comprehensively to water quality changes than the federal policy. In particular, the state policy applies to all waters of the state, including both groundwater and surface water, whose quality meets or exceeds water quality objectives. The policy states that the disposal of wastes into state waters shall be regulated to achieve the highest water quality consistent with maximum benefit to the people of the state and to promote the peace, health, safety, and welfare of the people of the state. The policy provides as follows:

- a. Where the existing quality of water is better than required under existing water quality control plans, such existing high quality will be maintained until it has been demonstrated that any change will be consistent with maximum benefit to the people of the state and will not unreasonably affect present and anticipated beneficial uses of such water.

- b. Any activity that produces waste or increases the volume or concentration of waste and that discharges to existing high-quality waters will be required to meet waste discharge requirements that will ensure (1) pollution or nuisance will not occur and (2) the highest water quality consistent with the maximum benefit to the people of the state will be maintained.

5.2.2.2 State Policy on Sources of Drinking Water (Resolution 88-63)

In 1988, the State Water Board adopted Resolution 88-63, “Sources of Drinking Water.” This policy specifies that, except under specifically defined circumstances, all surface water and groundwater of the state are to be protected as existing or potential sources of municipal and domestic supply. The policy lists specific and limited circumstances under which waters may be excluded from this policy.

5.2.3 Regional Water Quality Control Boards

Each Regional Water Board has primary responsibility for designating the beneficial uses of water bodies within its region, establishing water quality objectives for protection of those uses, issuing permits, and conducting enforcement activities. Numerical and narrative water quality objectives have been established to protect beneficial uses of water bodies. Water quality objectives are established in a basin plan for each of the nine regions. Permitting and enforcement are implementation tools for the regional water boards for protection of the state’s waters.

Regional water boards issue waste discharge requirements (WDRs), which are intended to regulate and monitor waste discharges to land and water and may include NPDES permits, as required by the CWA. WDRs issued to waste discharges impose discharge restrictions and pollutant limitations that protect water quality objectives. The permit processes also consider the state’s antidegradation policy. Unlike the CWA, which regulates only surface water, the Porter-Cologne Act regulates both surface water and groundwater.

Each of the nine Regional Water Boards has adopted a basin plan. Basin plans establish water quality objectives, which are mandated by both the CWA and the Porter-Cologne Act, and provide the basis for protecting water quality in California. Sections 13240–13247 of the California Water Code specify that the basin plans shall include the following:

- ▶ water quality objectives that, in the judgment of the Regional Water Board, will ensure the reasonable protection of beneficial uses and the prevention of nuisance and
- ▶ a program of implementation for achieving water quality objectives, including a description of the nature of actions that are necessary to achieve the objectives, time schedules for the actions to be taken, and a description of surveillance to be undertaken to determine compliance with objectives.

5.2.4 California Environmental Quality Act

CEQA requires government agencies to consider the environmental consequences of their actions before approving plans and policies or committing to a course of action on a

project. The CEQA process is intended to: (1) inform government decision makers and the public about the potential environmental effects of proposed activities; (2) identify the ways that environmental damage can be avoided or significantly reduced; (3) prevent significant, avoidable environmental damage by requiring changes in projects, either by the adoption of alternatives or imposition of mitigation measures; and (4) disclose to the public why a project was approved if that project would have significant environmental effects (Public Resources Code Sections 21000 and 21001).

Consistent with these purposes, CEQA applies to most state, regional, and local agency decisions to carry out, authorize, or approve projects that could have adverse effects on the environment. CEQA requires that public agencies inform themselves about the environmental effects of proposed actions, consider all relevant information before they act, give the public an opportunity to comment on the environmental issues, and avoid or reduce potential harm to the environment when feasible.

To ensure their validity, an agency's actions should comply with CEQA's statutory provisions as well as the state environmental guidelines that have been adopted by the Secretary of Resources and incorporated into the State CEQA Guidelines (Title 14 of the California Code of Regulations, Section 15000 et seq.).

The CEQA process begins with a preliminary review of the proposal to determine whether CEQA applies to the agency action, or whether the action is exempt (State CEQA Guidelines Sections 15060–15061). If the agency determines that the activity is not subject to CEQA, it may file a notice of exemption and no further action to comply with CEQA is required (State CEQA Guidelines Sections 15061 and 15062). If the agency determines that the activity is a project subject to CEQA, the agency then must prepare either an EIR or a negative declaration. For programs that have been certified as an exempt regulatory program by the Secretary for Natural Resources pursuant to subdivision (c) of Public Resources Code section 21080.5, an agency may comply with CEQA by preparing a substitute environmental document in place of an EIR. The State Water Board's procedural requirements for certified regulatory programs are set forth at Title 23, California Code of Regulations, section 3775 et. seq.

5.2.5 California Land Conservation Act (The Williamson Act)

The California Land Conservation Act, also known as the Williamson Act, was enacted to provide landowners and local governments with a strategy to protect open space and agricultural lands while integrating long-term planning and growth patterns. Under a Williamson Act contract, the property owner is guaranteed that the property would be taxed according to its potential agricultural income, as opposed to the maximum valued use of the property, such as for residential development.

5.2.6 State Farmland Security Zones

State Farmland Security Zones (FSZs) were established by the California Department of Conservation with the same intent as Williamson Act contracts. An FSZ must be located in an Agricultural Preserve (area designated as eligible for a Williamson Act contract) and designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland,

or Farmland of Local importance. Agricultural and open space lands are protected for a minimum of a 20 year term under an FSZ designation and receive an even greater property tax reduction than a Williamson Act valuation. Land protected in an FSZ cannot be annexed by a city or county government or school district (CDC 2001).

An FSZ can be terminated through a nonrenewal or cancellation. The nonrenewal allows for a rollout process to occur over the remainder of the term of the contract, where the tax rates would gradually rise to the full rate by the end of the 20-year term. A cancellation must be applied for and approved by the director of the CDC, and specific criteria must be met. The cancellation must be in the public interest and consistent with the Williamson Act criteria (CDC 2001).

5.2.7 Transportation

The California Department of Transportation (Caltrans) establishes performance standards that apply to specific routes and publishes those standards in transportation concept reports (TCRs). Performance standards in TCRs are often expressed as level-of-service (LOS) standards. Caltrans establishes reasonable LOS standards for state highway facilities, based on current operating conditions, surrounding land uses, local policies, and current plans for improvement on the facility. Local agencies typically identify LOS standards for roadways in the agencies' jurisdiction.

5.2.8 Noise

Title 24 of the California Code of Regulations establishes standards governing interior noise levels that apply to all new residential units in California. In addition, the State of California has developed land use compatibility guidelines for community noise environments. The State of California General Plan Guidelines provides guidance for the acceptability of projects within specific community noise equivalent level (CNEL)/Ldn contours. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. Local policies regulating noise often provide more detailed, and sometimes more restrictive, regulations on noise levels and acceptable means of reducing them to an acceptable level. Noise ordinances identify performance standards intended to prevent any use that may create dangerous, injurious, noxious, or otherwise objectionable conditions.

5.3 Land Use Planning and Environmental Protection Regulations

5.3.1 Land Use Planning

The discussion below summarizes the land use planning process in California and is based primarily on information contained in *Curtin's California Land Use and Planning Law* (Curtin and Talbert 2006). The land use planning process in California would be unaffected from implementation of the proposed Policy.

Local jurisdictions receive the authority to exercise their respective land use planning functions through State of California planning laws. State laws that outline the legal framework within which a city or county must exercise its land use functions include the following, which does not represent an exhaustive list of all applicable laws:

- ▶ local planning agencies, commissions, and departments (Government Code Section 65100 et seq.);
- ▶ the general plan and specific plan (Government Code Section 65300 et seq.);
- ▶ zoning regulations (Government Code Section 65800 et seq.);
- ▶ the Subdivision Map Act (Government Code Section 66410 et seq.); and
- ▶ the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (Title 14, California Code of Regulations Sections 15000-15387).

5.3.1.1 Planning Commission

The planning commission is a permanent committee of five or more citizens who have been appointed by the city council to review and act on matters related to planning and development. (For unincorporated communities, the planning commission would serve the local county jurisdiction.) The commission holds regularly scheduled public hearings to consider land use matters, such as the general plan, specific plan, rezonings, use permits, and subdivisions. Depending on local ordinances, local commissioners may serve at the pleasure of the city council, so that commission membership changes in response to changes in the council, or they may serve for a fixed term. A city need not create a planning commission. In some jurisdictions, especially smaller ones, the city council acts as the planning commission. Typically, the planning commission advises the city council on land use matters. The city council may follow the recommendation of the commission, may reverse or modify the commission action, or may send the project back to the commission for further review. All commission decisions are subject to appeal to the council, and the council has the final say in all city matters. The city's community development or planning department is the planning commission's staff.

For the most part, state law requires public hearings before planning actions are taken. The planning commission considers planning proposals in light of federal, state, and local regulations and potential environmental effects, and receives testimony from citizens and other interested parties at the meetings. Pursuant to the Ralph M. Brown Act (also known as the Open Meeting Act or the Brown Act, Government Code Section 54950), all planning commission meetings must be open and public, including study sessions and workshops. This means that a quorum of commissioners can discuss commission business in a public meeting only.

5.3.1.2 General Plan

California Government Code Section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The general plan is a comprehensive,

long-term, and general document that describes plans for the physical development of the city or county and of any land outside its boundaries that, in the city's or county's judgment, bears relation to its planning. The general plan shall consist of seven mandatory elements—land use, circulation, housing, conservation, open space, noise, and safety—and any optional element(s) that the city or county chooses to adopt. In addressing these topics, the general plan shall consist of a “statement of development policies” and must include diagrams and text setting forth “objectives, principles, standards, and plan proposals” (Government Code Section 65302). The general plan is a long-range document that typically addresses the physical character of an area over a 20-year period. Finally, although the general plan serves as a blueprint for future development and identifies the overall vision for the planning area, it remains general enough to allow for flexibility in the approach taken to achieve the plan's goals. The preparation, adoption, and implementation of a general plan serve to:

- ▶ identify the community's land use, circulation, housing, environmental, economic, and social goals and policies as they relate to land use and development;
- ▶ provide a basis for local government decision making, including decisions on development approvals and exactions;
- ▶ provide citizens with opportunities to participate in the planning and decision-making processes of their community; and
- ▶ inform citizens, developers, decision makers, and other cities and counties of the ground rules that guide development within the community.

The general plan provides a two-way connection between community values, visions, and objectives and the planned physical development within a community (e.g., construction of subdivisions and public works projects). The adoption of a general plan or any amendments thereto generally must follow the procedure set forth in Government Code Section 65350 et seq. If a city has a planning commission, at least one public hearing must be conducted by the planning commission and then one public hearing by the city council after proper notice has been given.

5.3.1.3 Specific Plan

The specific plan is a step below the general plan in the land use approval hierarchy and is used for the systematic implementation of the general plan for particular geographic areas (Government Code Section 65450). Zoning ordinances, subdivisions, public works projects, and development agreements all must be consistent with the adopted specific plan (Government Code Sections 65455 and 65867.5). A specific plan must include all of the following in detail in both text and diagram(s):

- ▶ distribution, location, and extent of the uses of land, including open space, within the area covered by the plan;
- ▶ proposed distribution, location, extent, and intensity of major components of public and private infrastructure and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan;

- ▶ standards and criteria by which development will proceed, and applicable standards for conservation, development, and use of natural resources; and
- ▶ a program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out the matters listed above.

The specific plan also must include a statement of the relationship of the specific plan to the general plan. The procedure for adoption of a specific plan is basically the same as for a general plan. Government Code Section 65457, with certain exceptions, exempts residential development projects from further CEQA review if they are undertaken to implement and are consistent with a specific plan for which an EIR has been certified.

5.3.1.4 Zoning Regulations

The state zoning law (Government Code Section 65800 et seq.) provides for the “adoption and administration of zoning laws, ordinances, rules, and regulations by counties and cities, as well as to implement such general plan as may be in effect in any such county or city.” Zoning is basically the division of a city or county into districts and the application of different regulations in each district. Zoning regulations are generally divided into two classes: (1) those that regulate the height or bulk of buildings within certain designated districts—in other words, those regulations that have to do with structural and architectural design of the buildings; and (2) those that prescribe the uses of buildings within certain designated districts. The California State Legislature has given cities maximum control over zoning matters while ensuring uniformity of, and public access to, zoning and planning hearings.

Zoning ordinances must be consistent with the general plan and any applicable specific plan (Government Code Section 65860[a]). When amendments to the general plan are made, corresponding changes in the zoning ordinance may be required within a reasonable time to ensure the land uses designated in the general plan would also be allowable by the zoning ordinance (Government Code Section 65860[c]). If the city council approves, or approves as modified, a proposed zoning amendment, the council must introduce it at a regular or adjourned regular meeting and then adopt the amendment by ordinance at a subsequent meeting (Government Code Sections 36934 and 65850). County boards of supervisors are authorized to adopt a rezoning ordinance with only one reading after a noticed public hearing (Government Code Section 25131).

5.3.1.5 Variances and Conditional Use Permits

Variances and conditional use permits (CUPs) are methods by which a property owner may seek relief from the strict terms of a comprehensive zoning ordinance. Just as the amendment of a zoning regulation is a legislative function, the granting of variances and use permits are quasi-judicial, administrative functions. Variances and use permits run with the land.

A variance is a permit issued to a landowner by an administrative agency (zoning administrator, board of zoning adjustment, planning commission, or the city council acting as an administrative agency) to construct a structure not otherwise permitted under the zoning regulations. An application for a variance must address circumstances

surrounding the applicant's situation that are unique in that they create disparities between the applicant's property and other properties in the area. The unique circumstances must cause hardship to the property owner to justify the authorization for a variance. Unique circumstances may be related to the parcel size, shape, topography, location, or surroundings (Government Code Section 65906). A variance must be consistent with the objectives of the general plan and the zoning ordinance.

A CUP is the second administrative method of providing relief from the strict terms of a comprehensive zoning ordinance. State zoning law is silent on establishing any criteria for issuing or denying a CUP, which is evaluated based on local ordinances (Government Code Section 65901). Typically, following a list of permitted uses in each zone, a local zoning ordinance will provide for other uses that are not permitted as a matter of right, but that could be allowable with issuance of a CUP.

5.3.1.6 *Subdivision Map Act*

The Subdivision Map Act (Map Act) vests in the legislative bodies of local agencies the power to regulate and control the design and improvement of subdivisions (Government Code Section 66411). Each city or county must adopt an ordinance regulating and controlling subdivisions for which the Map Act requires a tentative and final or parcel map. The Map Act's primary goals are:

- ▶ to encourage orderly community development by providing for the regulation and control of the design and improvement of the subdivision, with a proper consideration of its relation to adjoining areas;
- ▶ to ensure that the areas within the subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community; and
- ▶ to protect the public and individual transferees from fraud and exploitation (61 Opinions of California Attorney General 299, 301 [1978]; 77 Opinions of California Attorney General 185 [1994]).

The Map Act is applied in conjunction with other state land use laws such as the general plan and the specific plan, zoning, CEQA, and the Permit Streamlining Act (Government Code Section 65920 et seq.).

A subdivision is defined in the statute as “the division, by any subdivider, of any unit or units of improved or unimproved land, or any portion thereof, shown on the latest equalized county assessment roll as a unit or as continuous units, for the purpose of sale, lease, or financing, whether immediate or future” (Government Code Section 66424). The Map Act distinguishes between a subdivision consisting of five or more parcels and one consisting of four or fewer parcels.

In general, a subdivision of five or more parcels requires a tentative and a final map; a subdivision of four or fewer requires only a parcel map. The Map Act contains detailed provisions governing the content and form of the final map. Government Code Section 66433 et seq. establishes the persons who are qualified to prepare the final map, the

standard for preparation, and the various certificates and acknowledgments required for the final map. Parcel map procedures and approvals are left up to the local ordinance, except as specifically provided in the Map Act (Government Code Section 66463[a]). Approval of a final map or parcel map does not in itself confer a vested right to develop. No vested right to develop exists until actual building or other permits for identifiable buildings have been issued and substantial work has been done thereafter in reliance on those permits.

In 1984, the California State Legislature added Chapter 4.5, “Development Rights,” to the Map Act; this statute established a new form of tentative map for subdivisions in the state: the vesting tentative map (Government Code Section 66498.1 et seq.). The approval of a vesting tentative map expressly confers a vested right to proceed with a development in substantial compliance with the ordinances, policies, and standards in effect at the time the application for approval of the vesting tentative map is deemed complete (Government Code Section 66498.1[b]).

Before a tentative map or a parcel map is approved, the city or county must find that the proposed subdivision, together with the provisions for its design and improvement, is consistent with the general plan and any applicable specific plan. If the local jurisdiction makes any of the following findings with respect to a tentative map or a parcel map, it must deny approval of the map (Government Code Section 66474):

- ▶ The proposed map or the design or improvements of the proposed subdivision are inconsistent with the applicable general and specific plans, or with a draft general plan being prepared under an extension by the Governor’s Office of Planning and Research.
- ▶ The site is not physically suited for the proposed type or density of development. Where such a finding has been made, the legislative body may approve the map on conditions that will reduce the density.
- ▶ The design or proposed improvements are likely to cause substantial environmental damage, or substantially and avoidably injure fish, wildlife, or their habitats, or cause serious public health problems, based on an analysis of the project as part of the environmental compliance process (e.g., the conclusions presented in an EIR prepared for the project).

With regard to the environmental review process for a project involving construction of a subdivision, if the EIR identifies negative impacts, the city or county may impose conditions to mitigate those impacts based on Government Code Section 66474(e). The imposition of mitigating conditions is grounded in the theory that the power to reject for a given impact implies the power to accept with conditions that would prevent that impact.

5.3.1.7 Population, Employment, and Housing

As with land use, regulatory guidance regarding population, employment, and housing is provided primarily by local planning documents. The policies, regulations, and ordinances presented in those documents address such issues as the provision of housing sufficient to support the current and projected local population at a range of income

levels; the establishment, maintenance, and expansion of particular types of development in specific areas; the density of development; and the balance between employment-generating development and housing development.

5.3.2 Environmental Protection Regulations

The proposed Policy provides minimum standards for siting, construction, operation, and maintenance of specified OWTS in California. The process by which local agencies approve a project that includes construction and operation of an OWTS is a local land use and development process that would remain unchanged by the proposed Policy. Other regulations designed to protect the environment would also be unaffected by implementation of the proposed Policy. This subsection provides an overview of the more important federal, state, and local laws and regulations that protect the environment of California. These laws and regulations would continue to guide the construction and operation of projects in California, including OWTS.

5.3.2.1 Air Quality

The California Air Resources Board (ARB) is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA). The CCAA required ARB to establish California ambient air quality standards (CAAQS). In most cases, the CAAQS are more stringent than the national ambient air quality standards (NAAQS). The act specifies that local air districts should focus particular attention on reducing the emissions from transportation and area wide emission sources, and provides districts with the authority to regulate indirect sources.

In California, toxic air contaminants (TACs) are regulated primarily through the Tanner Air Toxics Act and the Air Toxics Hot Spots Information and Assessment Act of 1987. The Tanner Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB can designate a substance as a TAC.

On a regional level, air quality control districts or air quality management districts attain and maintain air quality conditions in the region through comprehensive programs of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. Clean-air strategies typically include the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. Air pollution control or management districts also may adopt and enforce ARB's control measures regarding TACs. For example, under the Yolo-Solano Air Quality Management District's (YSAQMD's) Rule 3-1 ("Permit Requirements"), Rule 3-4 ("New Source Review"), and Rule 3-8 ("Federal Operating Permit"), all sources that possess the potential to emit TACs are required to obtain permits from the district. Permits may be granted to these operations if they are constructed and operated in accordance with applicable regulations.

Policies in general plans and other local planning documents typically support such actions as development of a local circulation system that encourages and accommodates the use of transportation modes other than the automobile; the construction of new development that incorporates the infrastructure, facilities, and design standards necessary to encourage and accommodate transit, ridesharing and non-automobile travel modes; development and implementation of a local transportation system management ordinance applicable to major projects and employers; and separation of sensitive land uses from significant sources of air pollutants or odor emissions.

5.3.2.2 Public Services

Typically, regulations regarding public services are presented in local planning documents and relate to a broad range of issues, including the provision of adequate fire-flow rates in new development; the assurance that fire equipment access is integrated into the design of new facilities; the assurance that emergency access is an integral part of the design of all public facilities for the safety of users and workers; the assurance that public facilities and services (such as water, sewer, and emergency services) are available before occupancy of residential projects; the assurance that new development is provided with all necessary water service, fire hydrants, and roads consistent with Fire Department Standards; the assurance that all new development is constructed according to fire safety and structural stability standards contained in the latest adopted California Fire and Building Codes and related high rise regulations; the provision and maintenance of an adequate level of police and fire department equipment and personnel consistent with city growth and development; and the adequate provision of parkland.

5.3.2.3 Public Utilities

Section 21151.9 of the Public Resources Code and Section 10910 et seq. of the Water Code require the preparation of water supply assessments for large developments (i.e., more than 500 dwelling units or nonresidential equivalent) to determine whether existing and projected water supplies are adequate to serve the projects while also meeting existing urban and agricultural demands and the needs of other anticipated development in the service area in which the project is located. Where a water supply assessment concludes that insufficient supplies are available, the assessment must lay out the steps that would be required to obtain the necessary supply.

Section 15155 of the State CEQA Guidelines requires that local agencies must have sufficient information about the availability of water supplies when they decide whether to approve projects. Section 15155 requires the city or county to consult with water agencies to approve the tentative map to obtain written verification of sufficient water supply for proposed residential development of more than 500 units if the public water system would have at least 5,000 service connections and for proposed residential development that would increase by 10% or more the number of the public water system's existing service connections if the system has fewer than 5,000 connections.

The determination of sufficiency is required to consider the availability of water supplies over a historical record of at least 20 years; the applicability of an urban water shortage contingency analysis prepared pursuant to Section 10632 of the Water Code that includes

actions to be undertaken by the public water system in response to water supply shortages; the reduction in water supply allocated to a specific water use sector pursuant to a resolution or ordinance adopted, or a contract entered into, by the public water system; and the amount of water that the water supplier can reasonably rely on receiving from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer. The written verification must provide evidentiary proof of the water supply.

5.3.2.4 California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation (e.g., incineration, distillation, gasification, or biological conversion other than composting) and land disposal, the State Legislature passed the California Integrated Waste Management Act (CIWMA) of 1989 (Assembly Bill 939), effective January 1990. According to the CIWMA, all cities and counties were required to divert 25% of all solid waste from landfill facilities by January 1, 1995, and 50% by January 1, 2000. Each city is required to develop solid waste plans demonstrating integration with the CIWMA plan and the applicable county plan. The plans must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal. Disposal of pumped septage is subject to the state's landfill regulations or the federal government's regulations contained in Part 503 of Title 40 in the Code of Federal Regulations where it is applied to land.

5.3.2.5 California Uniform Building Code

The State of California provides minimum standards for building design through the California Building Standards Code (California Code of Regulations, Title 24). Title 24 is published by the California Building Standards Commission and it applies to all building occupancies (see Health and Safety Code Section 18908 and 18938) throughout the State of California.

Title 24 is reserved for state regulations that govern the design and construction of buildings, associated facilities and equipment and contains requirements to the structural, mechanical, electrical, and plumbing systems, and requires measures for energy conservation, green design, construction and maintenance, fire and life safety. Thus, Title 24 is organized into separate parts. Each part is given a separate name reflecting its subject. Some parts are based on model codes as discussed later. Part 5 is named the California Plumbing Code and is based on the 2009 Uniform Plumbing Code. Appendix K in the California Plumbing Code contains standards for the design of OWTS.

Cities and counties are required by state law to enforce CCR Title 24 (Health and Safety Code Sections 17958, 17960, 18938(b), & 18948). Cities and counties may adopt ordinances making more restrictive requirements than provided by CCR Title 24, because of local climatic, geological, or topographical conditions. Such adoptions and a finding of need statement must be filed with the California Building Standards Commission (Reference Health and Safety Code Sections 17958.7 and 18941.5).

5.3.2.6 Hazards

Several state agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety. The California Environmental Protection Agency (Cal/EPA) and the Office of Emergency Services (OES) establish rules governing the use of hazardous substances in California. Within Cal/EPA, the Department of Toxic Substances Control (DTSC) has primary responsibility, with delegation of enforcement to local jurisdictions, for regulating the generation, transport, and disposal of hazardous substances under the authority of the Hazardous Waste Control Law (HWCL). Regulations implementing the HWCL list hazardous chemicals and common substances that may be hazardous; establish criteria for identifying, packaging, and labeling hazardous substances; prescribe management of hazardous substances; establish permit requirements for hazardous substances treatment, storage, disposal, and transportation; and identify hazardous substances prohibited from landfills.

The California Highway Patrol and California Department of Transportation (Caltrans) enforce regulations specifically related to hazardous materials transport. Individual Regional water boards are the lead agencies responsible for identifying, monitoring, and cleaning up leaking underground storage tanks (USTs). The results of environmental site assessments are provided to DTSC for concurrence and to obtain recommendations for further investigation. State regulations applicable to hazardous substances and hazardous waste regulations are outlined in Titles 22 and 26 of the California Code of Regulations (CCR).

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations in the state. Cal/OSHA regulations concerning the use of hazardous substances include requirements for safety training, availability of safety equipment, hazardous substances exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous substances, describing the hazards of chemicals, and documenting employee training programs.

5.4 Chapter 4.5, Division 7 of the California Water Code

Water Code section 13290 et seq. requires the State Water Board to develop statewide standards for OWTS in consultation with the California Department of Public Health (DPH), California Conference of Directors of Environmental Health (CCDEH), California Coastal Commission (CCC), counties, cities, and other interested parties. Water Code section 13290 et seq. further requires standards to include, at a minimum, the seven types of requirements listed below (often referred to as the “seven points”):

1. Minimum operating requirements that may include siting, construction, and performance requirements
2. Requirements for OWTS adjacent to waters listed as impaired under Section 303(d) of the Clean Water Act
3. Requirements authorizing local agency implementation

4. Corrective action requirements
5. Minimum monitoring requirements
6. Exemption criteria
7. Requirements for determining when an existing OWTS is subject to major repair

Water Code section 13290 et seq. also requires the regional water boards to incorporate the new statewide standards into their basin plans. Neither the legislation nor the proposed OWTS policy preempt the regional water boards or any local agency from adopting or retaining performance requirements for OWTS that are more protective of public health or the environment than the new statewide policy.

5.5 Representative Regulations of Selected Local Governments and Regional Water Quality Control Boards

California currently has no statewide system of regulation that directly addresses the construction, operation, maintenance, and monitoring of OWTS. However, numerous California cities and counties regulate OWTS through a variety of means, including zoning ordinances and permitting requirements. Circumstances vary among agencies, but enforcement of these regulations generally is the responsibility of the local environmental or public health department. Examples of local regulations related to OWTS are provided below.

The current state of OWTS regulations in California is characterized by separate and overlapping regional and local regulations established by the nine regional water boards, 58 counties, and a variety of cities and special districts that administer OWTS regulations. To provide context for the evaluation of environmental impacts in this SED, a comparison of representative regulations will be useful. Given the large number of jurisdictions, each with its unique set of regulations, a comprehensive review of these regulations would be prohibitive.

For the purposes of this SED, 15 local agencies (counties and cities) and the nine regional water boards were selected as a representative sample of the regulating agencies (see Table 5-1 and Table 5-2). The agencies are geographically diverse, representing the north, south, east, west, coastal, and central regions of California. Recognizing that all jurisdictions have unique circumstances specific to the administration of OWTS in their areas, the sample includes jurisdictions with a range of unique physical, administrative, and regulatory conditions. For example, El Dorado County represents a jurisdiction with large areas of steep, difficult terrain; Merced County has a large number of inhabitants depending on groundwater for domestic water supply; and Stinson Beach County Water District administers OWTS installed in fast-draining beach sands.

Several jurisdictions within California have established unique administrative arrangements to manage OWTS. Incorporated and unincorporated areas may set up county service areas or special districts, such as those established by the City of Paradise in Butte County and the community of Stinson Beach in Marin County. Several jurisdictions within California experience administrative challenges stemming from their

remote location or remote areas within jurisdictional limits. Remoteness and small local government play into the approach used by Modoc and Inyo Counties, where contracted professional services fill the administrative role.

Several local agencies have no sewers within their jurisdictions as a consequence of historical development (e.g., the City of Paradise) or the intentional will of the citizens. Many California jurisdictions are predominantly rural, such as El Dorado and Sutter Counties. The City of Los Angeles and City of Calabasas, in contrast, are intensively urbanized jurisdictions. Santa Cruz and Riverside counties represent jurisdictions that have areas representing both conditions within this spectrum. Several jurisdictions experience a strong pressure for urban development, regardless of existing population densities within their jurisdictions; Sutter and Riverside Counties are examples.

Typically, local agencies derive their regulations from the Uniform Plumbing Code (UPC). The UPC provides instruction on percolation testing, flow projections from households and other establishments, basic features of leach lines and seepage pits, setbacks from water bodies and buildings, the depth of unsaturated soil below the disposal field, and other prescriptive requirements. However, the range and content of those prescriptive measures vary widely. For example, the UPC prohibits construction of OWTS in areas with steep slopes, defined as slopes greater than 20%. The depth to a limiting layer (e.g., impermeable layer, ground water, fractured bedrock) ranges from more than 5 feet for conventional systems to less than 2 feet for supplemental treatment systems. Allowable percolation rates typically may not be any slower than 60 or 120 minutes per inch, also a sizeable range.

Within the state, some regulations have changed little for several decades, notably the City of Los Angeles. Regulations such as those of Merced County incorporate modest change. Regulations from the Cities of Calabasas and Paradise and Solano and Sutter Counties reflect recently and substantially revised policies that address specific site or administrative issues and accommodate technological advances to resolve site constraints. Despite these differences, virtually all regulations of the local agencies listed in Table 5-1 and Table 5-2 focus on the siting, design, and construction of new OWTS. The repair of OWTS is addressed sporadically and with little consistency.

Operations and monitoring of conventional and supplemental systems are minimally addressed or completely absent. A notable exception is Sonoma County, which addresses operating permits and monitoring wells in detail, especially for OWTS with supplemental treatment systems. Many local agencies may address operations and monitoring in other ways to a greater extent than exhibited in their OWTS policies. In these cases, individual OWTS permitting requirements address operations and monitoring.

Lot size limitations and OWTS prohibitions affect the distribution of OWTS. All of the regional water boards identify specific OWTS prohibition areas (Table 4-12). Merced and Santa Cruz Counties limit minimum lot sizes, as do the Central Coast, Central Valley, Lahontan, Colorado, and Santa Ana Regional Water Boards. The regional water boards typically establish OWTS prohibition areas based on water quality objectives for

groundwater and surface waters within discrete hydrologic and hydrogeologic units, as described in each regional water board's basin plan. However, the regional water boards' policies governing OWTS as described in the basin plans are brief and often not specific. Specific pollutants, such as nitrate or coliform bacteria, may drive the designation of prohibitions, Areas of Special Concern (e.g., in Sutter County by the San Francisco Regional Water Board), or Contributory Areas (e.g., the Malibu Lagoon and Beaches Bacterial Contributory Areas by the Los Angeles Regional Water Board).

The regional water boards typically permit OWTS that serve facilities with larger flows as opposed to local agencies, although the cut-off point between regulation by regional water boards and local agency differs from regional water board region to region. The regional water boards' use of water quality objectives to regulate OWTS contrasts sharply with local agencies' generally prescriptive requirements. The water quality objectives typically translate into performance measures for discharge and receiving water quality with specific monitoring and reporting requirements to ensure that individual OWTS owners adhere to their permits.

Table 5-1 and Table 5-2 provide a comparison of representative county and city OWTS regulations with the proposed Policy. Table 5-3 presents a comparison of relevant regulations of the nine regional water boards with the proposed Policy.

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
Point 1: Minimum Operating Requirements									
General requirements: Siting and design, construction, performance requirements and maintenance	<ul style="list-style-type: none"> ▶ TIER I <ul style="list-style-type: none"> • Applies to all new and replaced OWTS with the capacity to treat up to 3,500 gpd • Qualified professionals requirements: <ul style="list-style-type: none"> ○ Soils and site evaluation and design • Designed for percolation rates from 1-90 MPI. • Setbacks from wells, surface waters, unstable land masses, and drinking water intakes. • Ground slope limitation of 25 percent. 	<ul style="list-style-type: none"> • Tank performance standards: <ul style="list-style-type: none"> ○ Effluent filter required ○ Two 20-inch risers ○ 2 compartment s • General standards provided for siting, design, and construction including conditions requiring special design, such as STS • Standards for pump systems • Qualified professionals requirements: for design (registered civil 	<ul style="list-style-type: none"> • Must first notify county of intended discharges • County must approve construction of facilities for wastewater discharge • Prescriptive measures follow the 1985 Uniform Plumbing Code • STS may be used on a case-by-case basis and with regional water board or County Environmental Health Services approval using siting and emergency 	<ul style="list-style-type: none"> • Tank performance standards <ul style="list-style-type: none"> ○ Two 20-inch risers ○ 2 compartment s • Prescriptive measures follow a modified Uniform Plumbing Code • Qualified professionals required for site evaluation and design of new construction and some repairs • Use percolation testing for system suitability. • Allow STS where 	<ul style="list-style-type: none"> • Qualified professionals requirements for design and site evaluation • General standards provided for siting, design, and construction • STS required for repairs with less than 12 inches to groundwater or bedrock • Allows composting systems • STS require a permit for STS • Contains lot size requirements: <ul style="list-style-type: none"> ○ 12,000 SQFT for sites with 	<ul style="list-style-type: none"> • Tank sizing and performance standards <ul style="list-style-type: none"> ○ Two 20-inch risers ○ Two compartment s • 5 feet of continuous unsaturated soil for leach lines and 10 feet for pits • General standards provided for siting, design, and construction • Qualified professionals required <ul style="list-style-type: none"> ○ for site evaluation, design, and installation of conventional 	<ul style="list-style-type: none"> • Tank performance standards: <ul style="list-style-type: none"> ○ Secure access opening and watertight risers ○ 1/8-inch mesh effluent filter • Ordinance with setbacks • Qualified professionals requirements: Registered environmental health specialist or registered civil engineer for testing and design • Percolation test requirements • Qualified service 	<ul style="list-style-type: none"> • Septic tank must have risers • Site suitability determined by percolation testing and groundwater level. • Setbacks in ordinance • Site evaluation and design done by registered environmental health specialist, geologist, or civil engineer • Slopes limited to less than 30% • Prescribes design flows • Lot size limitations apply, typically 	<ul style="list-style-type: none"> • Septic tank <ul style="list-style-type: none"> ○ Must be able to accommodate an effluent filter ○ Two 20-inch risers • Qualified professionals requirement: <ul style="list-style-type: none"> ○ Siting and design must be prepared by a civil engineer, geologist, environmental health specialist, or certified professional soil scientist ○ For STS, must use a registered civil engineer of environmental health specialist. Treatment

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
	<ul style="list-style-type: none"> • Average density not greater than 2.5 acres per OWTS. • Tank performance standards: <ul style="list-style-type: none"> ○ Secure access opening and watertight risers ○ 3/16-inch mesh effluent filter ○ IAPMO-approved tanks ○ Aerobic conditions in unsaturated zone ▶ POSSIBLE IN TIER 2 <ul style="list-style-type: none"> • Various supplemental treatment systems • Various dispersal systems 	<p>engineer, geologist or environmental health specialist or certified soil scientist) and construction (Class A, B-1, or C-42 licensed contractor)</p> <ul style="list-style-type: none"> • STS required if percolation >60 mpi or less than 5 mpi 	<p>contingency plans</p> <ul style="list-style-type: none"> • Residential land use density dictates applicability of OWTS • OWTS prohibited on lots smaller than ½ acre 	<p>prescriptive condition cannot be met, including performance requirements: TKN: 50% reduction, BOD: 30 mg/L; TSS 30 mg/L; pH 6 -9</p> <ul style="list-style-type: none"> • Includes setback requirements 	<p>municipal water</p> <ul style="list-style-type: none"> ○ 40,000 SQFT where no municipal system exists. • Adopted Appendix I of the 1991 Uniform Plumbing Code with modifications • 	<p>systems as approved by environmental health or licensed by the state</p> <ul style="list-style-type: none"> ○ for STS design – registered geologist, engineer, or environmental health specialist • STS required for new, larger subdivisions with OWTS • STS required where poor percolation rates, slopes greater than 20%, and for treatment from more than one residence 	<p>provider required for operation and maintenance</p> <ul style="list-style-type: none"> • Operating permit required for STS with pumping schedule, proof of ongoing maintenance at least every 3 months and maintenance agreement 	<p>1 acre for existing lots and 2.5 acres within a reservoir containing watershed.</p> <ul style="list-style-type: none"> • O&M manual required for STS • STS required when <ul style="list-style-type: none"> ○ A repair cannot otherwise meet requirements using a standard systems ○ For OWTS in soils with 1–5 mpi percolation rate ○ Nitrate must be reduced in the effluent 	<p>must be better or equal to intermittent sand filter.</p> <ul style="list-style-type: none"> • STS Performance <ul style="list-style-type: none"> ○ 240,000/100 mL total coliform or 2.2 MPN/mL fecal coliform from monitoring well ○ STS required where nitrate elevated in soil or groundwater • Establishes design flow. • Minimum lot size in accordance to Chapter 26, 26-82. • 25% slope limitation • Setbacks • Septic tank sizing specifications

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
	<p>► TIER 3</p> <ul style="list-style-type: none"> • Supplemental treatment system Performance <ul style="list-style-type: none"> ○ 30 mg/l BOD, 30 mg/l TSS, 50% reduction in TN, 200 MPN fecal coliform per 100 mL ○ Periodic performance evaluation 								
<p>Dispersal System Standards and Requirements</p>	<p>► TIER I</p> <ul style="list-style-type: none"> • 12 inches soil cover • Soil texture or percolation test allowed as the basis for sizing the dispersal field • 5-foot minimum depth to groundwater or impermeable layer for conventional OWTS 	<ul style="list-style-type: none"> • Standards for materials, spacing, depth, and size of conventional leach lines • Soil texture or percolation test allowed as the basis for sizing the dispersal field • Setbacks to water bodies and buildings • 4 feet of 	<ul style="list-style-type: none"> • All discharges must be confined to subsurface percolation without nuisance, pollution, or contamination • Only use of percolation test allowed • Typically install on slopes < 30% • Low- 	<ul style="list-style-type: none"> • Prescriptive measures follow a modified Uniform Plumbing Code • Only use of percolation test allowed • Setbacks to water bodies, water lines, and buildings • Seepage pits allowed • 0.7 reduction 	<ul style="list-style-type: none"> • 2–3 feet of continuous unsaturated soil • Standards for materials, spacing, depth, and size of conventional leach lines • Soil texture or percolation test allowed as the basis for sizing the dispersal field 	<ul style="list-style-type: none"> • 5 feet of continuous unsaturated soil • Setbacks to water bodies, buildings, and property lines • Both soil characterization and percolation test are required for siting and sizing the dispersal field 	<ul style="list-style-type: none"> • 5 feet of continuous unsaturated soil to groundwater and 8 feet to an impermeable layer for leach lines • 10 feet of continuous unsaturated soil to groundwater and 8 feet to an impermeable 	<ul style="list-style-type: none"> • 5–50 feet of continuous unsaturated soil depending on the percolation rate • Percolation test must be used to size the dispersal system • Setbacks and slope restrictions apply • Seepage pits 	<ul style="list-style-type: none"> • 3–20 feet to groundwater and 3–5 feet to other limiting factor depending on the percolation rate • Soil texture or percolation test allowed as the basis for sizing the dispersal field • Limit on percentage of rock in soil set at 50% • Seepage pits not

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
	<ul style="list-style-type: none"> • Limits for rocky soils exceeding 50% rock, • Leachfield designed using no more than 4 square feet of infiltrative area per linear foot of trench, and with trench no wider than 3 feet. ▶ POSSIBLE IN TIER 2 • Allowance for using special engineered fill for minimum depth. • Seepage pits • 0.7 reduction factor for gravelless chambers • drip dispersal • Evapotranspiration system • Composting Toilet • Wisconsin 	<p>continuous unsaturated soil below disposal field</p> <ul style="list-style-type: none"> • Allowance for using a soil cap of fill with specified texture and depth fill • Standards for pressurized distribution • Standards for steep slopes • Leach lines must use serial distribution with distribution boxes • Gravelless systems may count sidewall • No provision for seepage pits • No provision for subsurface drip dispersal separate from an STS 	<p>permeability soils may prohibit use of OWTS</p> <ul style="list-style-type: none"> • 5-foot minimum depth to groundwater or impermeable layer for conventional OWTS • Setbacks per the Lahontan Regional Water Board • Seepage pits allowed 	<p>factor allowed for gravelless chambers</p> <ul style="list-style-type: none"> • Leach beds allowed • Pump systems require 24-hour storage capacity • Allow fills where insufficient soil is present on the site to meet prescriptive requirements. 	<ul style="list-style-type: none"> • Leach fields, subsurface drip dispersal, and at-grade mounds allowed 		<p>layer for seepage pits</p> <ul style="list-style-type: none"> • Only percolation tests dictate for sizing dispersal system • Setbacks to water bodies, water lines, and buildings • Seepage pits allowed • Specific mound system requirements • Adjustments for rocky soils • Leachfield designed using bottom area and sidewall. 	<p>allowed</p>	<p>allowed</p> <ul style="list-style-type: none"> • 0.7 reduction factor allowed for gravelless chambers • Evapotranspiration system not allowed • Graduated Application rates • Allows the use of sidewall and bottom are for sizing leachfield

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
	<ul style="list-style-type: none"> Mound At-grade System 								
Point 2: Requirements for Impaired Waters									
<p>These requirements apply to OWTS within the watersheds of impaired water bodies as listed under Section 303(d) of the Clean Water Act unless otherwise stated. Other regulatory requirements associated with the other six points of this table also apply.</p>	<ul style="list-style-type: none"> Mandatory supplemental treatment five years for water bodies without TMDLs, or where otherwise OWTS are determined to be contributing to the impairment. 	None stated	None stated	None stated	None stated	<ul style="list-style-type: none"> Established Zone of Benefit in vicinity of Lake Yosemite and new Zones of Benefit for large subdivisions; Zones of Benefit require nitrate effluent limit of 10 mg/L as N. 	None stated	<ul style="list-style-type: none"> Limitations on septic systems exist in areas of groundwater recharge The San Lorenzo Wastewater Management Plan allows development with OWTS with standards from the regional water board; repairs must follow these standards 	None stated
Point 3: Requirements Authorizing Local Implementation									
<p>The requirements provide direction on how OWTS regulations can be entirely or partially</p>	<ul style="list-style-type: none"> Local Implementation is allowed and detailed in Tier 2 	<ul style="list-style-type: none"> County is granted authority to permit and enforce OWTS 	<ul style="list-style-type: none"> MOU with Lahontan Regional Water Board 	<ul style="list-style-type: none"> County authority applies to single-family residences only 	<ul style="list-style-type: none"> MOU between local agency and regional water board 	No reference to local versus state implementation	<ul style="list-style-type: none"> OWTS regulation is shared between the county and the 	<ul style="list-style-type: none"> MOU between local agency and regional water board allows county 	<ul style="list-style-type: none"> Ordinance adopted to comply with basin plan and Porter Cologne Water

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
implemented by counties, cities, and special districts.	<ul style="list-style-type: none"> Local agency or regional water board retains option for setting more protective requirements for water quality 	<ul style="list-style-type: none"> systems for individual and multiple dwellings and small commercial facilities Department of Environmental Management is recognized by the Board of Supervisors as a public entity (i.e., a local agency empowered to plan, design, finance, construct, operate, maintain, and abandon any sewage system or treatment facility serving a land development) 					regional water boards, with County as lead agency for single-family residences, including new subdivisions and small commercial; regional water boards may review and approve or deny subdivisions and maintain jurisdiction over multifamily and large flow discharges.	to permit and oversee OWTS to 20,000 gpd	Quality Control Act

Point 4: Requirements for Corrective Actions

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
	<p>► TIER 4</p> <ul style="list-style-type: none"> All failing OWTS must be repaired or replaced per the time schedule set by the regional board or local agency. 	<ul style="list-style-type: none"> Enforcement will be taken for infractions against the county ordinance Correction notice issued if system operation or construction in violation of county ordinance Permit suspension 	None stated	<ul style="list-style-type: none"> Overflows, discharges to the ground surface of any premises are prohibited and may cause the health director to order occupants to vacate premises within 24 hours 	<ul style="list-style-type: none"> Failure identified and a permit application to correct the condition 	None stated	<ul style="list-style-type: none"> The director shall order abatement when a failure condition is present that threatens public health or water quality. Enforcement may include requirement for immediate abatement based on severity of the environmental or health risk. May include immediate pumping of septic tank, use of portable toilets, and other interim measures while permanent abatement measures under permit. 	<ul style="list-style-type: none"> If a system fails, it must be corrected 	<ul style="list-style-type: none"> Required for a failing OWTS or when a violation of the county code occurs
Point 5: Minimum Monitoring Requirements									

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
Inspection requirements	<p>All local agencies permitting OWTS will monitor and report annually to regional water boards. The annual report shall include:</p> <ol style="list-style-type: none"> 1. number and location of complaints pertaining to OWTS operation and maintenance; 2. pumper reports submitted as part of the local septic tank cleaning registration program pursuant to Section 117400 et. Seq. of the California Health and Safety Code; 3. number and location of OWTS repair permit 	<ul style="list-style-type: none"> • Inspections during siting and construction phases 	<ul style="list-style-type: none"> • Optional real estate certification inspection for integrity and functionality of tank and leach field 	<ul style="list-style-type: none"> • Inspections to verify that number of bedrooms and capacity of the installed OWTS match the permit 	<ul style="list-style-type: none"> • Installation inspections • Monitoring inspection of nonstandard OWTS, including STS systems 	None stated	<ul style="list-style-type: none"> • All new and repaired STS must have yearly inspection of tanks and proof of septic tank pumping at least every 5 years • For STS, must have proof of service contract and repairs records 	<ul style="list-style-type: none"> • All STS subject to regular inspections • Inspections by health officer during construction of OWTS 	<ul style="list-style-type: none"> • Inspections during site evaluation and construction phases

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
	number and location of permits issued for new OWTS, and which Tier the permit is issued under								
System operation inspections and monitoring	<ul style="list-style-type: none"> TIER 2 has options that will allow groundwater monitoring. TIER 3 telemetric alarm requirements or monthly inspection by the homeowner. 	None stated	None stated	None stated	<ul style="list-style-type: none"> Operating permit for large flows, nonstandard systems Monitoring and inspection requirements, but varying discharge limits may vary the requirements 	<ul style="list-style-type: none"> Must inspect solids levels in septic tanks at new larger subdivisions Biyearly evaluation of proper functioning of experimental systems 	<ul style="list-style-type: none"> STS subject to yearly inspection and proof of cleaning every 5 years, ongoing maintenance, maintenance agreement 	<ul style="list-style-type: none"> Operating permit required for STS and possibly for other OWTS For STS, generic specification of monitoring frequency, location, and parameters provided in the code 	<ul style="list-style-type: none"> STS must have an operating permit with annual reporting and revocable permit
Groundwater quality monitoring	<ul style="list-style-type: none"> Optional under TIER 2 	None stated	<ul style="list-style-type: none"> 3-foot minimum depth to groundwater or impermeable layer for conventional OWTS 	None stated	<ul style="list-style-type: none"> May be required for STS 	None stated	<ul style="list-style-type: none"> For repairs only if using STS; monitor adjacent to mound system For a repair using a mound system, must monitor winter and spring for 3 	<ul style="list-style-type: none"> May be required as part of operating permit 	<ul style="list-style-type: none"> For siting by using soil mottling or monitoring wells within the proposed disposal field

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
							years adjacent to mound		
Effluent quality monitoring	TIER 3: <ul style="list-style-type: none"> Monitoring supplemental treatment system with disinfection quarterly with samples tested by a CDPH-certified laboratory 	None stated	None stated	None stated	<ul style="list-style-type: none"> Effluent flows and quality monitored under operating permits for high-flow and high-strength OWTS 	<ul style="list-style-type: none"> In Zones of Benefit, must meet 10 mg/L nitrate as N effluent limit. 	None stated	None stated	Form Purge within 25 feet of OWTS
Point 6: Exemption Criteria									
Conditions by which regional water boards may set criteria for exemptions to OWTS	<ul style="list-style-type: none"> OWTS regulated by WDRs may be exempted from requirements by regional water boards 	Not applicable for county agency	Not applicable for county agency	Not applicable for county agency	Not applicable for county agency	Not applicable for county agency	Not applicable for county agency	Not applicable for county agency; however, the ordinance does have a process for waivers and exemptions.	Not applicable for county agency
Point 7: Major Repair									
Requirements for determining when a system is subject to a major repair.	<ul style="list-style-type: none"> Major repair means: (1) for a dispersal system, any repair required for an OWTS 	<ul style="list-style-type: none"> A failing septic system is any system that discharges untreated or inadequately treated sewage 	None stated	<ul style="list-style-type: none"> Required when overflows or discharges to the ground surface of any premises occur “Failed 	<ul style="list-style-type: none"> Follow “Guidelines for Issuing Repair Permits” policy. 	<ul style="list-style-type: none"> Leach field failure if constant wet spots or lush growth over field, plumb drainage is 	<ul style="list-style-type: none"> When a system is determined to be in failure (i.e., is surfacing or leaking to groundwater, 	<ul style="list-style-type: none"> Minor repairs consist of replacing the septic tank or installing a greywater sump; all other 	<ul style="list-style-type: none"> When wastewater from an OWTS is: <ul style="list-style-type: none"> o Septic tank baffle missing; o backing into buildings o surfacing on

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
	<p>due to surfacing wastewater effluent and/or wastewater backed up into plumbing fixtures because the dispersal system is not able to percolate wastewater, or (2) for a septic tank, any repair required for a baffle failure or tank structural integrity failure such that either wastewater is exfiltrating or groundwater is infiltrating</p> <p>► TIER 4 All failing OWTS must be repaired or replaced in accordance the time schedule</p>	<p>or septic tank effluent directly or indirectly onto the ground surface, into public waters, or into a dwelling</p>		<p>seepage pits are those pits that overflow, are required to be pumped out, and have effluent sewage leaking on the lot or beyond.”</p>		<p>sluggish, or odors over the leach field</p>	<p>polluting of surface or groundwater, when sewage backs up into buildings, or a system is out of compliance with permit requirements)</p> <ul style="list-style-type: none"> • OWTS improvements or corrective work where such improvements result in replacement, enlargement or modification are major repairs. 	<p>repairs are considered major and must comply with current standards.</p>	<p>the ground</p> <ul style="list-style-type: none"> ○ discharged to surface water or groundwater ○ lacking unsaturated vertical soil separation to groundwater ○ elevated above the disposal pipe • For STS, when: <ul style="list-style-type: none"> ○ fecal coliform over 2.2 MPN or total coliform over 240,000 MPN ○ Nitrate limit not met

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
	from the regional board or local agency								
Conditions that require a repair	<ul style="list-style-type: none"> A major repair is required when surfacing effluent occurs from an OWTS or when effluent concentrations exceed the requirements for supplemental treatment systems. 	None stated	None stated	<ul style="list-style-type: none"> Overflows, discharges to the ground surface of any premises 	<ul style="list-style-type: none"> Repairs requiring permits include replacement of septic tanks, pump tanks or basins, pump controls, grease tanks, or the absorption system (dispersal system) 	None stated	<ul style="list-style-type: none"> Conditions requiring the replacement, enlargement, or modification of a septic tank, treatment unit, or dispersal system regardless of whether a failure condition exists 	<ul style="list-style-type: none"> Conditions that create a public health hazard or degrade surface water or groundwater quality Conditions that violate county OWTS code 	<ul style="list-style-type: none"> Failure to accept discharge; Discharge on the ground surface Discharge to Groundwater Saturated flow

Notes: BOD = biochemical oxygen demand.
 CDPH = California Department of Public Health.
 gpd = gallons per day.
 IAPMO = International Association of Plumbing and Mechanical Officials.
 mg/l = milligrams per liter.
 MOU = memorandum of understanding.
 mpi = minutes per inch.
 MPN = Most Probable Number.
 O&M = operation and maintenance.
 regional water board = regional water quality control board.
 STS = supplemental treatment system
 SWRCB = State Water Resources Control Board.
 TMDL = total maximum daily load.

Table 5-1: Points of Comparison for Select Counties and the Proposed Policy

Regulatory Elements	Proposed Project	El Dorado County	Inyo County	Los Angeles County	Mendocino County	Merced County	Riverside County	Santa Cruz County	Solano County
TN-N = total nitrogen as nitrogen. TSS = total suspended solids. WDR = waste discharge requirement.									
Sources: El Dorado County: El Dorado County Ordinance Chapter 15.32, El Dorado County Resolution No. 259-99. County of El Dorado. November 24, 1999. Inyo County: Inyo County Code 7.12, Discharge of Sewage, 7.52.020, and 7.52.060. Inyo County, Inyo County Code 14.08.030 (1985 Plumbing Code). Los Angeles County: County of Los Angeles 2002 Plumbing Code; Private Sewage Disposal Systems Guidelines for Department Personnel. January 25, 2002. Procedures for Application for Approval of Private Sewage Disposal System Construction. January 1, 2000. Los Angeles County Code Parts 3.38.450 and .460; 11.38.470 -- .670. Merced County: 1. Merced County Minimum Design standards – Operation and Maintenance, and Site Evaluation for On-Site Sewage Disposal Systems. Merced County Division of Environmental Health. 1995 2. New Onsite Sewage Requirements (Effective 11/18/05). Merced County Division of Environmental Health. 2005. Mendocino County: 1. Land Use Programs: On-Site Sewage (Septic) Systems and Water Wells. County of Mendocino Environmental Health. 2006. 2. Land Use Policies. County of Mendocino Environmental Health. 2006. 3. Land Development Requirements: Minimum Standards for On-Site Sewage Systems. Form #42.28. revised June 1998. 4. Non-Standard On-Site Sewage Disposal Systems Program. County of Mendocino Environmental Health. 1996. 5. Division of Environmental Health Policies and Procedures. Subject: Wet Weather Testing of Soils. December 1, 1982. Riverside County: 1. Ordinance No. 650.4; April 2, 1988. Ordinance 650.5 June 14, 2006.. 2. Onsite Wastewater Treatment Systems Technical Guidance Manual, Version A. 3. Ordinance No. 856: An Ordinance of the Count of Riverside Establishing a Septic Tank Prohibition for Specified Areas of Quail Valley and Requiring the Connection of Existing Septic Systems to Sewer. August 28, 2006. Santa Cruz County: Septic Ordinance; Santa Cruz County Code Chapter 7.38 Sewage Disposal 2007. Solano County: Solano County Ordinance Chapter 6.4; Sewage Standards.									

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
Point 1: Minimum Operating Requirements								
<p>General requirements: Siting and design, construction, performance requirements and maintenance</p>	<p>► TIER I</p> <ul style="list-style-type: none"> • Applies to all new and replaced OWTS with the capacity to treat up to 3,500 gpd • Qualified professionals requirements: <ul style="list-style-type: none"> ○ Soils and site evaluation and design • Designed for percolation rates from 1-90 MPI. • Setbacks from wells, surface waters, unstable land masses, and drinking water intakes. • Ground slope limitation of 25 percent. • Average density not greater than 2.5 acres per OWTS. 	<ul style="list-style-type: none"> • Tank performance standards: <ul style="list-style-type: none"> ○ Must be on approved list of water-tight tanks ○ Effluent filter required and department approved ○ Access risers to be water tight, at or above grade with secure, lockable lid ○ Designed for protection against flotation and groundwater intrusion ○ Must be tested in place to be water tight by commercial installer and/or authorized 	<ul style="list-style-type: none"> • Tank performance standards: <ul style="list-style-type: none"> ○ Conform to UPC, not less than 1,500 gallons, access risers, gas and water tight; if used as sump tank, shall have 1/8-inch screen and deliver design volume, installed level and not less than 12-inch cover, shall have effluent filter of approved type • Percolation testing to be used for design with soil profile requiring backhoe excavations, hand auguring and/or 	<ul style="list-style-type: none"> • Tank performance standards: <ul style="list-style-type: none"> ○ Septic tank construction shall be approved by the Tehama Building Department. Sizing according to bedroom count and minimum 1,200-gallon tank and system materials shall conform to UPC as adopted by the county or as superseded by this code ○ Onsite sewage disposal systems shall comply with UPC, as adopted by the 	<ul style="list-style-type: none"> • Onsite sewage disposal systems similar to Appendix K of 2007 California Plumbing Code, as adopted by the county • Specific septic tank requirements for earth loads, volume, and buoyancy. • Setbacks to water bodies and buildings specified • Alternative systems shall be approved by the DEHS, Building official and the regional water board; permit required before installation of this system • Soil testing for disposal systems 	<ul style="list-style-type: none"> • Tank performance standards: <ul style="list-style-type: none"> ○ IAPMO-approved tanks ○ Water tight ○ Restrictions on aboveground uses over tank • Registered Environmental Health Specialist or Registered Civil Engineer for design of most systems; licensed Class A or C-42 may design pump and dosing systems • Compliance with Appendix K, UPC • Conventional systems limited to using leach lines • Very detailed percolation testing and site 	<ul style="list-style-type: none"> • Septic tank performance standards: <ul style="list-style-type: none"> ○ Watertight ○ At least two compartments ○ Capacity to resist weight loading • Many other tank, valve, and component requirements • Site evaluation by Registered Environmental Health Specialist, Registered Civil Engineer, certified professional soil scientist, or certified engineering geologist/registered geologist • Site evaluation 	<ul style="list-style-type: none"> • Use of modified California Plumbing Code setting requirements for septic tank sizing and setbacks • Tank construction and access requirements • Licensed contractors for installation • Inspector registration program • Registered civil engineer or geologist for supplemental treatment system design • Supplemental treatment systems allowed throughout the city • STS required for commercial land uses, beach front properties, and

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
	<ul style="list-style-type: none"> • Tank performance standards: <ul style="list-style-type: none"> ○ Secure access opening and watertight risers ○ 3/16-inch mesh effluent filter ○ IAPMO-approved tanks ○ Aerobic conditions in unsaturated zone ▶ POSSIBLE IN TIER 2 <ul style="list-style-type: none"> • Various supplemental treatment systems • Various dispersal systems ▶ TIER 3 <ul style="list-style-type: none"> • Supplemental treatment system Performance <ul style="list-style-type: none"> ○ 30 mg/l BOD, ○ 30 mg/l TSS, ○ 50% reduction 	<ul style="list-style-type: none"> ○ professional <ul style="list-style-type: none"> ○ Tank sizing dependent on bedroom count ○ Multicompartme nt tank design requirements ○ Pump tank requirements are similar ○ Location of ST and PT [in vehicular traffic to be designed by registered engineer • Setbacks to water bodies and buildings specified • Standards for sand filters • Requirements for OWTS designers (state registered and approval by the department) and continuing education requirements 	<ul style="list-style-type: none"> ○ coring and minimum holes set in primary and reserve areas • Designed by person licensed or registered or otherwise authorized by California to design onsite wastewater systems • Depth to groundwater based on percolation and minimum depth to suitable soil set at 3 feet; minimum percolation set at 120 mpi; ground slope maximum set at 20% and greater requires geological report • Waiver approval required by regional water board for 	<ul style="list-style-type: none"> ○ county and the Manual of Septic Tank Practice, 1967; where conflicts occur, UPC supersedes, and where differences occur between this code and referenced standards, this code applies • Design standards and site evaluation shall be published by the DEH and approved by the County Board of Supervisors for standards and special or alternative systems • Special systems shall be designed by a consultant and certified to 	<ul style="list-style-type: none"> ○ to be conducted only by registered or certified professional personnel • Certification compliance of wastewater disposal system by person registered with DEHS and state registered in civil engineer, sanitarian, geologists, or C-42 contractor • Modifications and/or alternatives systems shall be considered on case-by-case basis upon petition to the DEHS • Special designated areas identified as "Maintenance 	<ul style="list-style-type: none"> ○ evaluation procedures defined 	<ul style="list-style-type: none"> ○ and design standards • Operating permit for standard and alternative systems • Soil group used to determine OWTS type • Design requirements for conventional and supplemental systems 	<ul style="list-style-type: none"> ○ other special cases • Revocable operating permit required and may include groundwater monitoring and reporting • O&M manual required for all systems • In general, regional water board Order 01-031 sets receiving water limits for commercial and multifamily development that the City enforces through permitting • Inspector program specified for OWTS inspection, including city-approved required training and passing of exam

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
	<p>in TN, 200 MPN fecal coliform per 100 mL</p> <ul style="list-style-type: none"> ○ Periodic performance evaluation 	<ul style="list-style-type: none"> • Construction by commercial installers (Class A, B-1, C-36 or C-42 licensed contractor) • STS required if percolation >60 mpi or less than 5 mpi 	<p>alternative systems</p> <ul style="list-style-type: none"> • Design standards established for pressure and alternative systems • Sand filter systems criteria established for conditions of greater than 5 mpi and inadequate depth-to-groundwater separation • Design standards established for drip dispersal systems 	<p>the DEH that system installed as specified or changed as approved by DEH</p> <ul style="list-style-type: none"> • Cesspools and holding tanks not allowed • Privies installation and use conditions specified • Requirements for grease interceptors specified and conformance to UPC 	<p>Areas” require specific conditions</p>			
<p>Dispersal System Standards and Requirements</p>	<ul style="list-style-type: none"> ▶ TIER I • 12 inches soil cover • Soil texture or percolation test allowed as the basis for sizing the dispersal field 	<ul style="list-style-type: none"> • Standards for materials, spacing, depth, and size of conventional leach lines • Standards provided for 	<ul style="list-style-type: none"> • Criteria established for holding tanks, permits for septic pumping and use of chemical toilets for temporary use • Percolation soil 	<ul style="list-style-type: none"> • Setbacks to water bodies, water lines, and buildings specified • Seepage pits allowed • Slope limited to 	<ul style="list-style-type: none"> • Percolation tests shall be used as the basis for sizing the dispersal field • Minimum setbacks specified 	<p>For conventional:</p> <ul style="list-style-type: none"> • >2 feet of continuous unsaturated soil • Many detailed requirements that address specific 	<ul style="list-style-type: none"> • Setbacks to water bodies, water lines, buildings, and other specified • Minimum separation to restrictive layer 	<ul style="list-style-type: none"> • Use of modified California Plumbing Code setting requirements for disposal field sizing, setbacks, and percolation testing • Sieve analyses may

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
	<ul style="list-style-type: none"> • 5-foot minimum depth to groundwater or impermeable layer for conventional OWTS • Limits for rocky soils exceeding 50% rock, • Leachfield designed using no more than 4 square feet of infiltrative area per linear foot of trench, and with trench no wider than 3 feet. ▶ POSSIBLE IN TIER 2 • Allowance for using special engineered fill for minimum depth. • Seepage pits • 0.7 reduction factor for gravelless chambers 	<ul style="list-style-type: none"> • minimum sewer pipe versus slope, sanitary tees, cleanouts for building sewer and effluent pipe, D-Boxes, trench design • Soil texture allowed as the basis for sizing the dispersal field • Percolation testing as required in situations of types 5 and 6 soils, referred to as "extended site evaluation" • Water table evaluations based on seasonal requirements • Standards for subdivisions • Standards for pressure distribution and gravelless 	<ul style="list-style-type: none"> • testing and soil profile used for design of standard systems • Groundwater evaluation based on percolation • Standards set for subdivisions. • Percolation testing required • Variances to standards established and require submittal to the RWQCB • No provisions for gravelless drainfield systems • Installation shall be by licensed contractor 	<ul style="list-style-type: none"> • 30% • Reserve area (replacement area) specified for residential, commercial, industrial, and agricultural • Prohibited areas specified for location of disposal areas • Additional evaluation may be required for other than residential single-family systems • Soil absorption conditions specified and minimum separation of 3-1/2 feet to restrictive layer in the upper horizons of the soil 	<ul style="list-style-type: none"> • Allows gravelless trenches • Requires a distribution box for OWTS with more than one leachlines or seepage pits. • Allows seepage pits • Specifies the size of gravel needed for dispersal system. • Specifies UPC design application rates for sizing drainfield. 	<ul style="list-style-type: none"> • conditions • 25 feet from cut banks, sharp grade changes • <30% slope <p>For STS:</p> <ul style="list-style-type: none"> • <2 feet of continuous unsaturated soil • Strict setback distances • Slope restrictions based on type of supplemental system • Must notify the county of malfunctioning system • Many prescriptive physical requirements for design of specific supplemental systems • Special requirements for commercial, agricultural, and 	<ul style="list-style-type: none"> • Trench and bed specifications • Steep slope requirements • Capping fill requirements • Design requirements for several soil-based systems 	<ul style="list-style-type: none"> • be used in lieu of percolation test • Infiltration test allowed for subsurface drip dispersal • Special conditions apply to beachfront property • Leach fields, absorption beds, seepage pits, and subsurface drip dispersal allowed • No reduction factor for infiltration chambers • Registered civil engineer, geologist, soils engineer, or environmental health specialist for site characterization • Groundwater mounding analysis may be required

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
	<ul style="list-style-type: none"> drip dispersal Evapotranspiration system Composting Toilet Wisconsin Mound At-grade System 	trenches <ul style="list-style-type: none"> Leach lines must use distribution boxes Criteria for failing systems, repairs and abandonment Minimum lot size specified per soil type No provision for seepage pits No provision for subsurface drip dispersal 				industrial discharges		
Point 2: Requirements for Impaired Waters								
These requirements apply to OWTS within the watersheds of impaired water bodies as listed under section 303(d) of the Clean Water Act unless otherwise stated, Other regulatory requirements associated with the	<ul style="list-style-type: none"> Mandatory supplemental treatment five years for water bodies without TMDLs, or where otherwise OWTS are determined to be contributing to the impairment. 	None stated	None stated	None stated	None stated	<ul style="list-style-type: none"> Nitrate-sensitive areas Seven areas have special restrictions, prohibitions, or construction requirements for protection or to remediate contamination 	None stated	<ul style="list-style-type: none"> Properties in the vicinity of 303(d) impaired water bodies with TMDLs for nitrate and/or total coliform linked to OWTS discharges require higher levels of STS treatment, including more stringent permit application details and effluent

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
other six points of this table also apply.								and groundwater monitoring requirements
Point 3: Local Implementation								
The requirements provide direction on how OWTS regulations can be entirely or partially implemented by counties, cities, and special districts.	<ul style="list-style-type: none"> Local Implementation is allowed and detailed in Tier 2 Local agency or regional water board retains option for setting more protective requirements for water quality 	<ul style="list-style-type: none"> No reference made to local or state implementation 	<ul style="list-style-type: none"> General manager of the Stinson Beach County Water District is authorized to enforce this code and may appoint a district engineer to implement 	<ul style="list-style-type: none"> Health officer shall be empowered to enforce the provisions of this chapter and amendments County authority applies to single-family residences and nonresidential in line with DEH published design standards and as approved by the County Board of Supervisors 	<ul style="list-style-type: none"> County Board of Supervisors designates the County DEHS as the enforcement authority 	<ul style="list-style-type: none"> MOUs and Joint Innovative Waste Treatment and Disposal System Evaluation Agreements in effect with the North Coast and San Francisco Regional Water Boards 	<ul style="list-style-type: none"> No reference made to local or state implementation 	<ul style="list-style-type: none"> MOU with Los Angeles Regional Water Board defining division of enforcement based on OWTS size and waste strength Close collaboration with Los Angeles Regional Water Board on large projects and projects with high-strength waste
Point 4: Requirements for Corrective Actions								
	<ul style="list-style-type: none"> TIER 4 All failing OWTS must be repaired 	<ul style="list-style-type: none"> Enforcement taken for infractions against 	<ul style="list-style-type: none"> Every wastewater disposal system 	<ul style="list-style-type: none"> Enforcement action for permit violation, such as 	<ul style="list-style-type: none"> Reasonable suspicion of threat to public 	<ul style="list-style-type: none"> Reasonable suspicion of threat to public 	<ul style="list-style-type: none"> Enforcement will be taken for failure to have or 	<ul style="list-style-type: none"> Enforcement action for violations of city OWTS code.

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
	or replaced per the time schedule set by the regional board or local agency.	the county ordinance and treated as a misdemeanor	will be inspected every 3 years. If found not to comply with design or is discharging to surface water, groundwater of the contiguous seashores of the district, the discharge permit may be revoked. Upon completion of repairs and the district determination is that the violation no longer exists, then the permit will be reissued.	commencing without a permit, shall be a violation of county code; shall be guilty of a misdemeanor punishable by fine not to exceed \$500 or imprisonment not to exceed 6 months or both	health and safety is grounds for temporary suspension of operational permit; revoked permit reinstated upon adequate repair, alteration, or maintenance	health and safety is grounds for temporary suspension of operational permit; revoked permit reinstated upon adequate repair, alteration, or maintenance <ul style="list-style-type: none"> • If disposal field area is physically altered by site activities such as grading, the vesting certificate may be revoked • Operating a septic system without an Operational Permit is grounds for corrective action 	comply with the requirements of the construction or operating permit conditions, except under conditions that allow for an emergency repair without a construction permit	A conviction assesses guilt of a misdemeanor punishable by a fine not to exceed \$1,000 or imprisonment up to 6 months or both. Each day of violation constitutes a separate offense.

Point 5: Minimum Monitoring Requirements

Inspection requirements	All local agencies permitting OWTS will monitor and report annually to	<ul style="list-style-type: none"> • Inspections during siting and construction phases 	<ul style="list-style-type: none"> • Designer shall provide an inspection schedule and will 	<ul style="list-style-type: none"> • Inspections shall be conducted by the administrative authority to 	<ul style="list-style-type: none"> • Installation inspections and subsequent inspection 	<ul style="list-style-type: none"> • Easement agreements required for county access for 	<ul style="list-style-type: none"> • Inspections of conventional and STS upon construction and 	<ul style="list-style-type: none"> • OWTS inspection required by city-approved contractor, civil or
-------------------------	--	---	--	---	--	--	---	--

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
	<p>regional water boards. The annual report shall include:</p> <ol style="list-style-type: none"> 1. number and location of complaints pertaining to OWTS operation and maintenance; 2. pumper reports submitted as part of the local septic tank cleaning registration program pursuant to Section 117400 et. Seq. of the California Health and Safety Code; 3. number and location of OWTS repair permit number and location of permits issued for new OWTS, and which Tier the permit is issued 		<p>provide an as-built once system is completed and note any changes for district approval as necessary</p>	<p>ensure work complies with this chapter</p>	<p>specified as well as periods between tank pumping</p> <ul style="list-style-type: none"> • 	<p>observing, testing, and sampling</p>	<p>as required for compliance and enforcement of operating permits</p>	<p>geotechnical engineer, engineering geologist, or environmental health specialist licensed or registered with the state</p> <ul style="list-style-type: none"> • Inspections include major components of conventional and STS

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
	under							
System Operation Inspections and Monitoring	<ul style="list-style-type: none"> TIER 2 has options that will allow groundwater monitoring. TIER 3 telemetric alarm requirements or monthly inspection by the homeowner. 	<ul style="list-style-type: none"> Alternative systems as directed by health officer 	<ul style="list-style-type: none"> Inspections will be conducted every 3 years 	<ul style="list-style-type: none"> None stated 	<ul style="list-style-type: none"> Special monitoring required within designated maintenance areas 	<ul style="list-style-type: none"> For STS, operational permit required; 1-year renewable operational permit STS should pump septic tank once every 5 years 	<ul style="list-style-type: none"> For STS, requires monthly inspections by experienced personnel, including Town of Paradise Licensed Evaluators and state-certified wastewater treatment plant operators; maintenance logs required 	<ul style="list-style-type: none"> Operating permit must be renewed every 2–5 years and upon point of property sale Revoked if noncompliance with city code Monitoring requirements included for commercial and multifamily sites STS must have telemetric alarms
Groundwater quality monitoring	<ul style="list-style-type: none"> Optional under TIER 2 	None stated	None stated	None stated	None stated	<ul style="list-style-type: none"> For STS: Semi-annual monitoring in monitoring wells in accordance with operating permit 2.2 MPN fecal coliform, 3,000 MPN total coliform in wells 	<ul style="list-style-type: none"> Surface water and groundwater monitoring program protocol for Town of Paradise Onsite Wastewater Management Zone 	<ul style="list-style-type: none"> Quarterly monitoring for commercial and multifamily residential sites in conjunction with the regional water board Order 01-031 and in special cases such as near 303(d) impaired water bodies

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
Effluent quality monitoring	TIER 3: <ul style="list-style-type: none"> Monitoring supplemental treatment system with disinfection quarterly with samples tested by a CDPH-certified laboratory 	None stated	None stated	None stated	None stated	None stated	▶ BOD, TSS, nitrogen, and flow monitoring at least quarterly	▶ Yes, when ongoing monitoring occurs as part of an operating permit, frequently in conjunction with requirements of regional water board Order 01-031
Point 6: Exemption Criteria								
Conditions by which regional water boards may set criteria for exemptions to OWTS	<ul style="list-style-type: none"> OWTS regulated by WDRs may be exempted from requirements by regional water boards 	Not applicable for county agency	Not applicable for county agency	Not applicable for county agency	Not applicable for county agency	Not applicable for county agency	Not applicable for city agency	Not applicable for city agency
Point 7: Major Repair								
Requirements for determining when a system is subject to a major repair.	▶ Major repair means: (1) for a dispersal system, any repair required for an OWTS due to surfacing wastewater effluent and/or wastewater	▶ A failing septic system is any system that discharges untreated or inadequately treated sewage or septic tank effluent directly or indirectly onto the	▶ During the periodic inspection (every 3 years), if the system is not performing according to design or contamination occurs to	▶ Emergency repairs specified to allow work to proceed without a permit, but subsequent permit required and to be approved in accordance with	▶ A failing system has surfacing effluent or septage, or backup of septage toward fixtures	▶ Determination of a serious or imminent threat to public health and safety associated with the use of a nonstandard or monitored system	▶ Upon written notification, the owner of an OWTS shall repair, modify, replace, or abandon a failing system discharging incompletely	▶ Emergency permitting procedures instituted to allow for upgrade of commercial or multifamily residential OWTS within coastal zone based on either

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
	<p>backed up into plumbing fixtures because the dispersal system is not able to percolate wastewater, or (2) for a septic tank, any repair required for a baffle failure or tank structural integrity failure such that either wastewater is exfiltrating or groundwater is infiltrating</p> <p>► TIER 4 All failing OWTS must be repaired or replaced in accordance the time schedule from the regional board or local agency</p>	<p>ground surface, that is backing up, or that allows untreated or inadequately treated sewage or septic tank effluent to reach groundwater</p> <p>► Also considered failing are privies, seepage pits, or cesspools; deep trenches that discharge directly to groundwater in special areas; metal/wood tanks; septic tanks considered a safety hazard and unrecorded drainfields</p>	<p>groundwater, surface water, or the contiguous seashores of the district, the permit may be revoked and repair may be required</p>	<p>county code</p>			<p>treated wastewater directly into public water or onto the ground or a malfunctioning systems causing (1) contamination of nearby water wells or surface water, (2) surface ponding or backups of sewage into the building, (3) seepage of wastewater below a building, or (4) foul odors from the disposal system are subject to repair.</p>	<p>report of overflows, backups, wastewater surfacing, or increase frequency of tank pumping to avoid these occurrences</p>
<p>Conditions that require a repair</p>	<ul style="list-style-type: none"> A major repair is required when surfacing effluent 	<p>See above.</p>	<p>See permit violation above.</p>	<p>See above requirements.</p>	<p>See above requirements.</p>	<p>Among other reasons, system was installed at time</p>	<p>See above requirements.</p>	<p>See above.</p>

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
	occurs from an OWTS or when effluent concentrations exceed the requirements for supplemental treatment systems.					when county codes were rudimentary or before codes		

Notes: BOD = biochemical oxygen demand.
 CDPH = California Department of Public Health.
 DEH = Division of Environmental Health.
 DEHS = County Department of Environmental Services.
 gpd = gallons per day.
 IAPMO = International Association of Plumbing and Mechanical Officials.
 mg/l = milligrams per liter.
 MOU = memorandum of understanding.
 mpi = minutes per inch.
 MPN = Most Probable Number.
 O&M = operation and maintenance.
 PT = Pump Tank
 regional water board = regional water quality control board.
 ST = Septic Tank
 STS = supplemental treatment system
 SWRCB = State Water Resources Control Board.
 TMDL = total maximum daily load.
 TN-N = total nitrogen as nitrogen.
 TSS = total suspended solids.
 UPC = Uniform Plumbing Code.

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
WDR = waste discharge requirement.								
<p>Sources: El Dorado County: (1) El Dorado County Ordinance Chapter 15.32. (2) El Dorado County Resolution No. 259-99. (3) County of El Dorado. November 24, 1999.</p> <p>Inyo County: Inyo County Code 7.12 Discharge of Sewage, 7.52.020, 7.52.060. Inyo County.</p> <p>Los Angeles County: (1) County of Los Angeles 2002 Plumbing Code; Onsite Wastewater Treatment System (OWTS) guidelines. September 1, 2009. (2) Procedures for Application for Approval of Private Sewage Disposal System Construction. January 1, 2000. (3) Los Angeles County Code Parts 3.38.450 and .460; 11.38.470 -- .670.</p> <p>Calabasas, City of: (1) Onsite Wastewater Treatment Systems: Title 28 of the Los Angeles County Code, Incorporating the California Plumbing Code, 2001 Edition, and the City of Malibu Ordinance No. 242 Amendments. March 2003. (2) Malibu Private Sewage Disposal System Design Requirements. November 24, 2004 (3) City of Malibu LCP Local Implementation Plan: Adopted by the California Coastal Commission on September 13, 2002. Pages 291 and 292. September 2002.</p> <p>Merced County: (1) Merced County Minimum Design Standards – Operation and Maintenance, and Site Evaluation for On-Site Sewage Disposal Systems. Merced County Division of Environmental Health. 1995 (2) New Onsite Sewage Requirements (Effective 11/18/05). Merced County Division of Environmental Health. 2005.</p> <p>Mendocino County: (1) Land Use Programs: On-Site Sewage (Septic) Systems and Water Wells. County of Mendocino Environmental Health. 2006. (2) Land Use Policies. County of Mendocino Environmental Health. 2006. (3) Land Development Requirements: Minimum Standards for On-Site Sewage Systems. Form #42.28. revised June 1998. (4) Non-Standard On-Site Sewage Disposal Systems Program. County of Mendocino Environmental Health. 1996. (5) Division of Environmental Health Policies and Procedures. Subject: Wet Weather Testing of Soils. December 1, 1982.</p> <p>Paradise, Town of: Town of Paradise Onsite Wastewater Management Zone: Manual for the Onsite Treatment of Wastewater. Revised November 8, 2005.</p> <p>Riverside County: (1) Ordinance No. 650.4. April 2, 1988. (2) Ordinance 650.5 June 14, 2006. (3) Waste Disposal for Individual Homes, Commercial, and Industrial. County of Riverside. August 1981.</p> <p>Santa Cruz County: (1) Septic Systems and Design Standards in Santa Cruz County. March 1999 (2) Santa Cruz County Code Chapter 7.38 Sewage Disposal. (3) Memorandum or Understanding: Regional Water Quality Control Board Central Coast Region and County of Santa Cruz. August 21, 2001 (4) Information on service Charges for County Service area No. 12: Septic System Maintenance and Management (5) Draft Standards and Procedures for the Repair and Upgrade of Septic Systems. August 28, 2002.</p> <p>Solano County: Solano County Ordinance Chapter 6.4; Sewage Standards. November 7, 2005.</p>								

Table 5-2: Points of Comparison for Select Counties and Cities and the Proposed Policy

Regulatory Elements	Proposed Project	Sutter County	Stinson Beach County Water District	Tehama County	City of Los Angeles	Sonoma County	Town of Paradise	City of Malibu
<p>Sonoma County:</p> <p>Sutter County:</p> <p>Stinson Beach County Water District:</p> <p>Tehama County:</p>	<p>Policy and Procedure Numbers 1-4-3, 9-2-2, 9-2-3, 9-2-6, 9-2-8, 9-2-9, 9-2-10, 9-2-13, 9-2-17, . Permit and Resource Management Department. Sonoma County. October 27, 2002. County Code Chapter 24 Sewers and Sewage Disposal. Guidelines for Subsurface Drip Irrigation (SDI) Systems. April 24, 2003.</p> <p>(1) Ordinance 1335. An ordinance of the County of Sutter ...relating to on-site sewage treatment and disposal. July 2, 2002.</p> <p>(2) Gravvelless Drainfields (2002): Standards and guidance for performance, application, design, and operation and maintenance.</p> <p>(3) Pressure Distribution (August 2002): Standards and guidance for performance, application, design, and operation and maintenance.</p> <p>(4) Intermittent Sand Filtration (200): Standards and guidance for performance, application, design, and operation and maintenance.</p>							

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
Point 1: Minimum Operating Requirements										
General requirements: Siting and design, construction, performance requirements and maintenance	<p>► TIER I</p> <p>•Applies to all new and replaced OWTS with the capacity to treat up to 3,500 gpd</p>	Tank standards based on IAPMO, UPC, or approved local agency standard: NSF- or IAPMO-certified STS	IAPMO and NSF tank standards Requirements for design professionals STS	Yes, sanitary engineers must design mound and evapotranspiration systems. STS	Requirements for qualified professionals not stated in the Basin Plan STS	Requirements for qualified professionals: registered engineer, geologist, sanitarian may	STS performance: a. Horizontal setbacks b. O&M manual c. Designed by a	Requirements for qualified professionals: Soils Report must be prepared by a registered engineer or certified	Requirements for qualified professionals not stated in the Basin Plan STS performance: None stated in	Requirements for qualified professionals not stated in the Basin Plan STS performance:

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
	<ul style="list-style-type: none"> • Qualified professionals requirements: <ul style="list-style-type: none"> ○ Soils and site evaluation and design • Designed for percolation rates from 1-90 MPI. • Setbacks from wells, surface waters, unstable land masses, and drinking water intakes. • Ground slope limitation of 25 percent. • Average density not greater than 2.5 acres per OWTS. • Tank performance standards: <ul style="list-style-type: none"> ○ Secure access opening and watertight risers ○ 3/16-inch 	treatment units Qualified professional defined as geologist, soil scientist, registered civil engineer, or registered environmental health specialist STS performance: <ul style="list-style-type: none"> • Maximum slope limits • Separation to groundwater 2–3 feet • Monitoring program • Reporting by the agencies 	performance: Region 2 uses the <i>Regional Board Waiver Program for Approving Local Agency Regulatory Programs</i> . Oct 1995 to define STS and other requirements; the document is not specifically mentioned in the Basin Plan. <ul style="list-style-type: none"> • 3 feet of continuous unsaturated soil • Monitoring program • Operational permit • Legal easement for agency access to system • Registered engineer or environmenta 	performance: <ul style="list-style-type: none"> • Evapotranspiration system requirements • Designed by registered professional engineer experienced in sanitary engineering • 40 g/day total nitrogen per acre for community systems in groundwater recharge areas • Risers required on STS • Engineer responsible for inspecting system during construction, establishing maintenance schedule, and 	performance: None stated, but the Basin Plan encourages the use of alternative waste treatment systems.	submit specially designed systems. STS performance: Ground slope maximum 30%	California-registered civil engineer, engineering geologist, or sanitarian d. System inspected by designer during installation e. STS may be required when higher density Public or private entity assumes O&M and monitoring responsibility	engineering geologist. STS performance: Basin Plan requires adherence to <i>Guidelines for Sewage Disposal from Land Developments</i> (1979). Innovative waste treatment systems as alternates to septic tank-subsurface systems will be evaluated on a case-by-case basis, but must conform with these guidelines and provide protection to water quality and public health at least equivalent to conventional septic tank-subsurface systems.	Basin Plan	Basin Plan requires adherence to <i>Guidelines for Evapotranspiration Systems</i> (1980) and <i>Guidelines for Mound Systems</i> (1980). Supplemental system requirements are otherwise deferred to the counties. Permit applications for WDR have same requirements as conventional systems.

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
	mesh effluent filter o IAPMO-approved tanks o Aerobic conditions in unsaturated zone ► POSSIBLE IN TIER 2 • Various supplemental treatment systems • Various dispersal systems ► TIER 3 • Supplemental treatment system Performance o 30 mg/l BOD, 30 mg/l TSS, 50% reduction in TN, 200 MPN fecal coliform per 100 mL o Periodic performance evaluation		I health specialist for design • Annual report	education of owner						

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
Dispersal System Standards and Requirements	<p>► TIER I</p> <ul style="list-style-type: none"> • 12 inches soil cover • Soil texture or percolation test allowed as the basis for sizing the dispersal field • 5-foot minimum depth to groundwater or impermeable layer for conventional OWTS • Limits for rocky soils exceeding 50% rock, • Leachfield designed using no more than 4 square feet of infiltrative area per linear foot of trench, and with trench no wider than 3 feet. <p>► POSSIBLE IN TIER 2</p> <ul style="list-style-type: none"> • Allowance for using special engineered fill 	<ul style="list-style-type: none"> • Shall be located, designed, constructed, and operated to ensure that effluent does not surface at any time and that percolation of effluent will not adversely affect beneficial uses of waters of the state • 30% maximum ground slope • 3-foot minimum depth to groundwater or impermeable layer for conventional OWTS; 2 feet for STS 	<ul style="list-style-type: none"> • 3–5 feet of continuous unsaturated soil; 2 feet for mounds • Maximum 20% slope • Maximum 120 mpi • Setbacks to wells, drainages, water bodies, and embankments • Reserve areas required for future replacement of dispersal field • Defined procedures for evaluating soil, including percolation testing and/or soil analysis as basis for application rates • Allowance for 	<ul style="list-style-type: none"> • Setbacks • Groundwater separation ranges from 5 to 50 feet • Separation to impermeable layer is 10 feet • Ground slope is not over 30% • Seepage pits have extra considerations, may require 10-50 feet to groundwater • Nitrate disposal restrictions over recharge areas 	None stated in Basin Plan. Refer to Region 4 General Orders 91-94, 01-031, and 2004-0146 for guidance on OWTS.	Provided in “Guidelines for Waste Disposal from Land Developments,” Appendix 36. Include 5-foot separation to groundwater or impermeable layer from leach lines and 10 feet from seepage pits.	<ul style="list-style-type: none"> f. Horizontal setbacks g. 5 feet to limiting layer or groundwater h. Maximum density of 2 EDUs per acre i. Slope and expansion area requirements j. Soil percolation limit 	<p>Per Guidelines:</p> <p>In areas overlying groundwaters which are useable or potentially usable for domestic purposes:</p> <ul style="list-style-type: none"> k. Separation to impermeable layer or groundwater is 5’ for leach lines and 10’ for seepage pits. l. Maximum 30% slope m. Soil percolation limits 	None stated in Basin Plan. Future discharge requirements for larger discharges not covered by an MOU must have 250 mg/L TDS discharge limit.	<p>Basin Plan requires conformance with design criteria used by the local jurisdiction (county) for setbacks, slope, leach line spacing, and percolation testing. Minimum depth of unsaturated soil thickness varies from 9 to 14 feet, depending on soil type and depth to groundwater.</p> <p>Permit applications to the regional water board must include (1) groundwater mounding study, (2) nitrate study, (3) public entity for O&M, (4) environmental study, and (5) O&M plan.</p> <p>Conditional Waiver No.1 (2008)</p>

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
	for minimum depth. • Seepage pits • 0.7 reduction factor for gravelless chambers • drip dispersal • Evapotranspiration system • Composting Toilet • Wisconsin Mound • At-grade System	<ul style="list-style-type: none"> • 5- to 40-foot setback to groundwater based on soil type • Setbacks to water bodies • Reserve areas required for future replacement of dispersal field • Defined procedures for evaluating soil, including percolation testing and/or soil analysis as basis for application rates • Allowance for engineered fill 	engineered fill							requires 5' to groundwater and 100' setback to surface waters.
Point 2: Requirements for Impaired Waters										
4. These	• Mandatory supplemental	Prohibition of	Moratoriums on	San Lorenzo	Basin Plan	Preferences for	Yes, for	Prohibition of all	On-site septic tank-	None stated in

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
requirements apply to OWTS within the watersheds of impaired water bodies as listed under section 303(d) of the Clean Water Act unless otherwise stated. Other regulatory requirements associated with the other six points of this table also apply.	treatment five years for water bodies without TMDLs, or where otherwise OWTS are determined to be contributing to the impairment.	septic systems in Jacoby Creek and Old Arcata Road areas	use of OWTS for new construction in Bolinas, Stinson Beach, Glen Ellen, and Emerald Lake Hills to protect nearby surface waters	River watershed discharges must follow Santa Cruz County wastewater management and nitrate management plans. Wastewater management plans should be implemented for urbanizing and high density areas. Prohibitions in Nipomo, San Luis Obispo, and Los Osos.	references the Aqua Dulce area, where groundwater is primary source of drinking water, and references "General waste discharge requirements for residential subsurface sewage disposal systems in areas where ground water is used for domestic purposes" (Order No. 91-94, adopted July 22, 1991); prohibited installation of new OWTS within 100 feet of water courses and bodies Discharges into environmentally sensitive areas require special WDR conditions. Order No. 2004—0146	sewered wastewater systems in areas of impaired groundwater	subdivisions in the Eagle Drainage Hydrological Area	OWTS discharges to Cathedral City Cove in 2012. Prohibition of OWTS discharges from parcels less than ½ acre over Mission Creek and Desert Hot Springs aquifers if sewer is available and also from larger parcels if sewer is available, unless density is 2 EDUs per acre or less.	subsurface disposal systems in the Quail Valley area of Riverside County are prohibited if a sewer system is available to serve the lot. Prohibition areas have 1-acre minimum lot size.	Basin Plan

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
					requires 600' separation to 303(d) listed waters. OWTS prohibited in Malibu Civic Center Area.					
Point 3: Local Implementation										
5. The requirements provide direction on how OWTS regulations can be entirely or partially implemented by counties, cities, and special districts.	<ul style="list-style-type: none"> Local Implementation is allowed and detailed in Tier 2 Local agency or regional water board retains option for setting more protective requirements for water quality 	Agreement between local agency and regional water board allows local agency to permit for single-family residences, commercial, and industrial establishments with less than 1,500 gpd, and subdivisions of fewer than five lots. Waivers, management districts, prohibitions require regional water board	MOU between local agency and regional water board typically used for implementation and enforcement, including STS	Local agency jurisdiction assumed in the Basin Plan but not defined	MOU with local agencies that delegate authority to the local agency for OWTS that: <ol style="list-style-type: none"> 3) Generate 20,000 gpd or less 4) Generate domestic or similar waste that is dsiposed of below the ground surface 5) Discharge waste from single family residential structures 	Preferred local agency implementation but recoverable to the regional water board if county ordinance is not compatible with the board	Collaborate sharing of responsibility between the regional water board and county occurs without an official MOU.	MOU for domestic OWTS per the 1979 Guidelines for Sewage Disposal from Land Development	Unclear.	MOU for domestic OWTS for individual households and other facilities with flows less than 1,200 gpd and less than five family units.

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
		involvement. Local agency shall report on STS performance and findings.			(developments of more than two homes are covered by the Regional Board) 6) Discharge waste from non-food related commercial facilities that generate 2,000 gpd or less					
6. Point 4: Requirements for Corrective Actions	<p>► TIER 4</p> <ul style="list-style-type: none"> All failing OWTS must be repaired or replaced per the time schedule set by the regional board or local agency. 	Abatement of failing systems includes short-term mitigation and permanent corrective measures. Abate discharges in accordance with local agency requirements, reduce effluent flows, and post areas subject to surfacing sewage. Use a	Provides guidance on how to use a sewer system, on frequent tank pumping, on making corrections to plumbing and leach fields, on water conservation, and on using a separate disposal field for wash water.	Provides guidance on how to use a sewer system, on frequent tank pumping, on making corrections to plumbing and leach fields, on water conservation, and on using a separate disposal field for wash water.	None stated in Basin Plan.	Prohibition on discharges that do not meet minimum protective criteria	Prohibition on discharges that do not meet minimum protective criteria	Prohibition on discharges that do not meet minimum protective criteria	Prohibition on discharges that do not meet minimum protective criteria	Prohibition on discharges that do not meet minimum protective criteria

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
		sewer system where available.	Alternative systems may be used. Provides guidance for identifying system failure.	Local agencies to bring failing systems into compliance with the Basin Plan.						
Point 5: Minimum Monitoring Requirements										
Inspection requirements	All local agencies permitting OWTS will monitor and report annually to regional water boards. The annual report shall include: 1. number and location of complaints pertaining to OWTS operation and maintenance; 2. pumper reports submitted as part of the local septic tank cleaning registration program pursuant to Section 117400	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan, typically stated in WDR	Guidelines for tank and drain field inspection	None stated in Basin Plan; typically stated in WDR.	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
	et. Seq. of the California Health and Safety Code; 3. number and location of OWTS repair permit number and location of permits issued for new OWTS, and which Tier the permit is issued under									
System Operation Inspections and Monitoring	<ul style="list-style-type: none"> TIER 2 has options that will allow groundwater monitoring. TIER 3 telemetric alarm requirements or monthly inspection by the homeowner. 	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR
Groundwater quality monitoring	<ul style="list-style-type: none"> Optional under TIER 2 	Supplemental systems subject to monitoring	Supplemental systems require monitoring wells within and around the soil absorption system	Monitoring wells and monitoring may be required as part of WDRs for individual OWTS in the San Lorenzo watershed.	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; typically stated in WDR	None stated in Basin Plan; however, WDRs set discharge limits and groundwater quality limits for discharges not falling under an MOU.	None stated in Basin Plan	None stated in Basin Plan; however, WDRs set discharge limits and groundwater quality limits for discharges not falling under an

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
										MOU (e.g., community sewerage systems or individual systems with flows larger than 1,200 gpd).
Effluent quality monitoring	TIER 3: <ul style="list-style-type: none"> Monitoring supplemental treatment system with disinfection quarterly with samples tested by a CDPH-certified laboratory 	Supplemental systems subject to monitoring	WDRs may require effluent monitoring for individual OWTS.	Provided through individual WDRs in the San Lorenzo watershed.	Not in Basin Plan. WDRs may require effluent monitoring for OWTS.	None stated in Basin Plan; however, WDRs set discharge limits and groundwater quality limits for discharges not falling under MOUs.	None stated in Basin Plan	If an MOU is in place, the local agency is responsible for providing any monitoring requirements.	None stated in Basin Plan	None stated in Basin Plan; however, WDRs set discharge limits and groundwater quality limits for discharges not falling under an MOU (e.g., community sewerage systems or individual systems with flows larger than 1,200 gpd).
Point 6: Criteria for Exemption										
Conditions by which Regional Water Boards may set criteria for exemptions to OWTS	<ul style="list-style-type: none"> OWTS regulated by WDRs may be exempted from requirements by regional water 	Provisions for waivers may be set to justify less stringent requirements	Current regulations allow waiver from filing of reports of waste discharge	Exemptions possible in a prohibition area if using STS	None stated in Basin Plan.	None stated in Basin Plan. Current Basin Plan provides waiver to WDRs	Exemptions (waiver) to current Basin Plan limits and land use	Exemption to minimum lot size criteria must provide sewered hookup offsets and	Exemption to minimum lot size criteria must provide sewered hookup offsets and	None stated in Basin Plan

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
	boards	than those in the Basin Plan either for individual lots or for defined geographic areas.	for OWTS under set flow volumes. Waiver also possible for site suitability criteria on a case-by-case basis.			to OWTS where project has county permit and county uses the regional water board's guidelines.	limitations if groundwater has no beneficial use, no pollution or degradation of surface water or groundwater would occur, and/or a community wastewater system is imminent. Case-by-case exemptions may be granted for density restrictions.	follow the Board's "Guidelines for Sewage Disposal from Land Developments."	follow the Board's "Guidelines for Sewage Disposal from Land Developments."	
Point 7: Major Repair										
Requirements for determining when a system is subject to a major repair.	► Major repair means: (1) for a dispersal system, any repair required for an OWTS due to surfacing wastewater effluent and/or wastewater backed up into plumbing	Failure of existing system (i.e., the ineffective treatment and disposal of waste resulting in the surfacing of raw or inadequately treated sewage effluent and/or the degradation	Failure of existing system (i.e., the ineffective treatment and disposal of waste resulting in the surfacing of raw or inadequately treated sewage effluent and/or the degradation	Informal definition: OWTS is inadequately or improperly sited, designed, or constructed; long-term use is not considered; inadequate operation and maintenance; destruction of	None provided in the Basin Plan	None stated in Basin Plan	None stated in Basin Plan	None stated in Basin Plan	None stated in Basin Plan	None stated in Basin Plan

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
	fixtures because the dispersal system is not able to percolate wastewater, or (2) for a septic tank, any repair required for a baffle failure or tank structural integrity failure such that either wastewater is exfiltrating or groundwater is infiltrating ► TIER 4 All failing OWTS must be repaired or replaced in accordance the time schedule from the regional board or local agency	of surface water or groundwater quality).	of surface water or groundwater quality).	beneficial uses of surface water or groundwater; transmission of diseases						
Conditions that require a repair	<ul style="list-style-type: none"> A major repair is required when surfacing effluent occurs from an OWTS or when effluent 	None stated in Basin Plan	Lack of conformance with current regulations	None provided in Basin Plan	None stated in Basin Plan	None stated in Basin Plan	None stated in Basin Plan	None stated in Basin Plan	None stated in Basin Plan	Implied conditions: (1) sewage will not surface, (2) discharge will not cause groundwater to

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
	concentrations exceed the requirements for supplemental treatment systems.									rise within 5 feet of the disposal system database, and (3) cumulative impacts will not cause nitrate concentrations in groundwater to exceed water quality standards.

Notes: BOD = biochemical oxygen demand.
 CCR = California Code of Regulations.
 CDPH = California Department of Public Health.
 EDU = equivalent dwelling unit.
 gpd = gallons per day.
 IAPMO = International Association of Plumbing and Mechanical Officials.
 mg/l = milligrams per liter.
 MOU = memorandum of understanding.
 mpi = minutes per inch.
 MPN = Most Probable Number.
 NSF = National Sanitation Foundation.
 O&M = operation and maintenance.
 regional water board = regional water quality control board.
 STS = supplemental treatment system
 SWRCB = State Water Resources Control Board.
 TDS = total dissolved solids.
 TMDL = total maximum daily load.
 TN-N = total nitrogen as nitrogen.
 TSS = total suspended solids.

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
<p>UPC = Uniform Plumbing Code. WDR = waste discharge requirement.</p> <p>Notes for North Coast, Region 1: 1. Policy on the Control of Water Quality with Respect to On-Site Waste Treatment and Disposal Objectives, 1996. North Coast Regional Water Quality Control Board. 2. Water Quality Control Plan for the North Coast Basin. North Coast Regional Water Quality Control Board. 1996.</p> <p>Notes for San Francisco Bay, Region 2: 1. Water Quality Control Plan for the California Regional Water Quality Control Board San Francisco Bay Region. 1995. 2. On-Site Wastewater Treatment and Disposal: Regional Board Waiver Program for Approving Local Agency Regulatory Programs. June 1996. 3. Minimum guidelines for the Control of Individual Wastewater Treatment and Disposal Systems. California Regional Water Quality Control Board San Francisco Bay Region. 1979.</p> <p>Notes for Central Coast, Region 3: 1. Water Quality Control Plan for the Central Coast Basin. Central Coast Regional Water Quality Control Board. 1988.</p> <p>Notes for Los Angeles, Region 4: 1. Water Quality Control Plan: Los Angeles Region (4) 1995. 2. General Waste Discharge Requirements for Small Commercial and Multifamily Residential Subsurface Sewage Disposal Systems. Order No. 01-031 adopted February 22, 2001.</p> <p>Notes for Central Valley, Region 5: 1. Water Quality Control Plan: Central Valley Basin (5) including Appendix 36, "Guidelines for Waste Disposal from Land Developments," 2004.</p> <p>Notes for Lahontan, Region 6: 1. "Executive Officer's Report January 2001." Region 6. 2001.</p> <p>Notes for Colorado River, Region 7: 1. References: "Water Quality Control Plan: Santa Ana River Basin 7: Includes Amendments Adopted by the Regional Board through October 2005." 2. Basin Plan references "Guidelines for Sewage Disposal From Land Development." 1979 wherein discharges falling under MOUs or WDRs are defined and minimum design criteria for septic systems to protect groundwater quality. This seems the appropriate document to reference for more basic regulations for OWTS. 3. EDU added to notes in table above.</p> <p>Notes for Santa Ana, Region 8: 1. It appears that the Basin Plan is not an adequate source basic of OWTS regulations for Region 8. In general, the Basin Plans do not address setting Waste Discharge Requirements and WDRs are where numerical discharge limits are found. 2. Basin Plan references "Guidelines for Sewage Disposal From Land Development." 3. References: Water Quality Control Plan: Santa Ana River Basin (8). 1995. Resolution No. R8-2004-0001. California Regional Water Quality Control Board Santa Ana Region. 2004. 4. Note addition of TDS to the table notes above.</p> <p>Notes for San Diego, Region 9: 1. References: Water Quality Control Plan: San Diego Basin (9), 1995.</p>										

Table 5-3: Points of Comparison for Regional Water Quality Control Boards and Proposed Policy

Regulatory Elements	Proposed Project	Regional Water Quality Control Board								
		North Coast (Region 1)	San Francisco Bay (Region 2)	Central Coast (Region 3)	Los Angeles (Region 4)	Central Valley (Region 5)	Lahontan (Region 6)	Colorado River Basin (Region 7)	Santa Ana (Region 8)	San Diego (Region 9)
2. Basin Plan references "Guidelines for New Communities and Individual Sewage Facilities" Resolution No. 79-44, June 25, 1979. This seems the appropriate document to reference for more basic regulations for OWTS.										