



~~State Water Resources Control Board~~

**DRAFT
Initial Study and Negative Declaration**

For

**State Water Resources Control Board
Water Quality Order Order WQ 2014-xxxx-DWQ**

**General Waste Discharge Requirements
for ~~Discharges to Land by~~ Small Domestic Wastewater
Treatment Systems**

NEGATIVE DECLARATION

Pursuant to Public Resources Code section 21080(c)

Project Title: General Waste Discharge Requirements for [Discharges to Land by Small Domestic Wastewater Treatment Systems](#)

Applicant: State Water Resources Control Board
Division of Water Quality
P.O. Box 100
Sacramento, CA 95812-0100

Project Description: The State Water Resources Control Board (State Water Board) is preparing General Waste Discharge Requirements for [Discharges to Land by Small Domestic Wastewater Treatment Systems \(General Order\)](#) that will be applicable statewide. The General Order will allow a monthly average flow rate up to 100,000 gallons per day and will allow the use of recycled water consistent with the statewide water recycling criteria in the California Code of Regulations, title 22, division 4, chapter 3 (title 22). Wastewater treatment systems will vary from septic tanks to activated sludge treatment facilities to pond facilities. The minimum level of treatment will be determined by [requirements of the General Order](#), the applicable Regional Water Quality Control Board's (Regional Water Board) Water Quality Control Plan, title 22, and mitigation measures required by future site-specific California Environmental Quality Act (CEQA) evaluations. The General Order will be an alternative to individual waste discharge requirements by the Regional Water Boards to streamline permitting of small domestic wastewater treatment systems that meet the specified enrollment conditions and which typically are a relatively low threat to groundwater quality.

Determination: The State Water Board is the Lead Agency, and has determined, on the basis of the whole record before it, including the attached Initial Study, that the proposed project will have a less than significant effect on the environment. This Negative Declaration was prepared pursuant to Public Resources Code section 21000 et seq., and the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.). A copy of this document, the Initial Study, General Order, and all supporting documents may be reviewed at the Cal/EPA Building at 1001 I Street, Sacramento, CA 95814.

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Adopted at a meeting of the State Water Resources Control Board held on September 23, 2014.

Jeanine Townsend
Clerk to the Board

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Acronyms and Abbreviations

AB	Assembly Bill
Basin Plan	Water Quality Control Plan
BOD	biochemical oxygen demand
Cal. Code Regs. or CCR	California Code of Regulations
CARB	California Air Resources Board
CBI	Commercial, Business, or Industrial
CDF	California Department of Forestry and Fire Prevention
CDPH	California Department of Public Health
CH ₄	Methane
CO ₂	Carbon Dioxide
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act
CERES	California Environmental Resources Evaluation System
Clean Water Act	Water Pollution Control Act of 1972
Delta	Sacramento-San Joaquin River Delta
DWR	California Department of Water Resources
EIR	Environmental Impact Report
ESA	Endangered Species Act of 1973
USEPA	United States Environmental Protection Agency
General Order	General Waste Discharge Requirements
GHG	Greenhouse Gas
gpd	gallons per day
H ₂ S	Hydrogen Sulfide
LAA	land application area
LOS	level-of-service
MBR	Membrane Biological Reactor (Membrane Bioreactor)
NCCP	Natural Community Conservation Plan
OPR	Office of Planning and Research
PDF	Portable Document Format
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1969
Regional Water Board	Regional Water Quality Control Board
§	Section
SB	Senate Bill
Small Domestic Systems	Small Domestic Wastewater Treatment Systems
State Water Board	State Water Resources Control Board
TDS	total dissolved solids
TSS	total suspended solids
USFWS	United States Fish and Wildlife Service
USGS	U.S. Geological Survey
WDR	Waste Discharge Requirement
WQO	Water Quality Order

1 Introduction

1.1 Overview and Regulatory Guidance

The State Water Resources Control Board (State Water Board) is preparing a General Waste Discharge Requirements Order (General Order) for land application of treated domestic wastewater. This Initial Study was prepared to address environmental factors related to such discharges. Small domestic wastewater treatment systems, with a monthly average flow rate up to 100,000 gallons per day (gpd) that discharge to land (small domestic systems) will be eligible for coverage under the General Order. Allowable wastewater consists of domestic wastewater.

Waste discharges to land are regulated by the Regional Water Quality Control Boards (Regional Water Boards) which issue waste discharge requirements (WDRs). WDRs require the discharge to conform to the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), the Regional Water Board's Water Quality Control Plan (Basin Plan), and applicable policies of the State Water Board and Regional Water Board. When discharges contain similar waste constituents and are treated using similar methods, General Orders can be adopted to more efficiently address applications for WDRs.

This General Order will allow land application of recycled water consistent with the requirements of the statewide water recycling criteria in the California Code of Regulations, title 22, division 4, chapter 3 (hereafter referred to as title 22), and the California Department of Public Health (CDPH) requirements.

This Initial Study is prepared to address California Environmental Quality Act (CEQA) requirements for the discretionary action of adopting a General Order and the resulting potential for reasonably foreseeable effects on the environment that wastewater treatment and disposal facilities may have. The Regional Water Boards have discretion whether to use the General Order or individual waste discharge requirements for regulatory coverage. Furthermore, local land use authorities have discretion over approval, siting, and design of new and expanding facilities. Therefore, the State Water Board cannot speculate on how many facilities may be enrolled in, constructed or expanded as a result of this General Order, and is not able to determine the location or design of any facilities that may be constructed. Pursuant to California Code of Regulations, title 14, section 15064 (d), a change which is speculative or unlikely to occur is not reasonably foreseeable and should not be considered in the environmental analysis. As such, this analysis is limited to the general effects associated with the construction and operation of new and/or expanded facilities.

This Initial Study was prepared based upon typical small domestic systems. The State Water Board cannot evaluate site-specific environmental factors at this

time because the General Order does not address a specific facility. Any new or expanding small domestic systems will be required to comply with CEQA and will likely conduct a project level CEQA review of site-specific impacts as part of a discretionary action associated with review/approval of the specific proposal.

This analysis only addresses new or expanding wastewater systems. The adoption of WDRs for existing small domestic systems is categorically exempt from CEQA under California Code of Regulations, title 14, section 15301 (ongoing or existing projects), section 15302 (replacement or reconstruction of existing utility systems), and section 15303 (new construction or conversion of small structures).

This Initial Study has been prepared in accordance with Public Resources Code section 21000 et seq. and California Code of Regulations, title 14, section 15000 et seq. An initial study of a project is conducted by the lead agency pursuant to CEQA in order to determine if a project may have a significant effect on the environment. In accordance with the CEQA Guidelines, section 15064(a), an environmental impact report (EIR) must be prepared if there is substantial evidence (including the results of an initial study) that a project may have a significant effect on the environment. A negative declaration or mitigated negative declaration may be prepared if the lead agency determines that the project would have no potentially significant impacts or that revisions made to the project mitigate the potentially significant impacts to a less than significant level.

1.2 Lead Agency

Under CEQA, the lead agency is the public agency with primary responsibility over the proposed project. The State Water Board is the lead agency under CEQA for this project because of its regulatory authority over water quality in California and its lead role in developing the General Order.

1.3 Purpose and Organization of This Document

The purpose of this Initial Study is to evaluate the foreseeable potential for environmental effects that may occur as a result of adopting the General Order. The objective of the General Order is to streamline the regulatory process for small domestic wastewater discharges to land.

The document is organized as follows:

- Chapter 1, "Introduction," describes the purpose and organization of this document.
- Chapter 2, "Regulatory Setting and Project Description," provides background information about the regulatory setting, environmental factors of concern, and provides a description of the proposed project.

- Chapter 3, “Potential Environmental Impacts,” uses the environmental factors provided in the CEQA Guidelines’ Environmental Checklist (Appendix G Environmental Checklist Form) to evaluate a range of potential impacts.

As a discretionary action, issuance of the General Order fits the CEQA definition of a project (Pub. Resources Code, § 21065 (c)) The State Water Board, as the project’s lead agency, have consulted with state responsible and trustee agencies before deciding whether a project’s impacts are significant (Pub. Resources Code, § 21080.3; Cal. Code Regs., tit. 14, § 15063) and prior to determining what type of CEQA document to prepare. The list of agencies consulted was developed with assistance from the California Office of Planning and Research. A draft Initial Study was transmitted on 27 September 2012 to all identified agencies. Responses were received from the California Department of Fish and Game, California State Lands Commission, and California Coastal Commission. No mitigation measures were recommended by any of the agencies.

1.4 Public Review and Comment

This Initial Study will be available for a 30-day public review and comment period as described in the Notice of Public Hearing. Comments must be received during the comment period to be considered prior to the meeting.

If you have any questions about document availability or the public review and comment process, please contact Timothy O’Brien at (916) 341-6904 or timothy.obrien@waterboards.ca.gov

2 Regulatory Setting and Project Description

2.1 Regulatory Setting

A broad network of federal and state laws provides the State Water Board, Regional Water Boards, CDPH, and local environmental and public health agencies the authority to protect beneficial uses of water, including the protection of drinking water and public health. That authority includes regulation of small domestic system discharges and other sources of contaminants that have the potential to cause adverse water quality effects. These laws include the federal Water Pollution Control Act of 1972 (Clean Water Act), Safe Drinking Water Act of 1974, subsequent amendments to these laws, and California's Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act), subsequent amendments to the Porter-Cologne Act, and related state policies.

California has nine Regional Water Boards (Figure 1) that work independently of each other but in cooperation with the environmental and public health agencies of the counties, cities, and, in some cases, special districts that have been created to help regulate discharges from small domestic systems.

Statutes regulating WDRs are contained in the Water Code and are summarized below:

- Water Code section 13260 requires each of the following persons to file with the appropriate Regional Water Board a report of the discharge, containing the information that may be required by the Regional Water Board:
 - (1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.
 - (2) A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.
 - (3) A person operating, or proposing to construct, an injection well.
- Water Code section 13263 requires the Regional Water Board to prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge to implement any relevant water quality control plans (Basin Plans) and take into consideration the beneficial uses to be protected and nuisance to be prevented. Water Code section 13263(i) allows general WDRs for a category of discharges if certain criteria are met.

- Water Code section 13264 prohibits dischargers to initiate any new discharge of waste or make any material changes in any discharge, or initiate a discharge to, make any material changes in a discharge to, or construct, an injection well prior to the filing of a report of waste discharge and issuance of waste discharge requirements or a waiver of WDRs.

2.1.1 *Wastewater Constituents of Concern*

The primary concerns associated with waste discharges to land are: (1) exposure to untreated wastewater and the pathogens it may contain; (2) degradation of groundwater quality; and (3) odors from overloaded or upset treatment plants.

Table 1 summarizes the typical constituents of concern associated with domestic wastewater discharges.

Table 1 Typical Wastewater Constituents of Concern

Constituent of Concern	Reason for Concern
Total suspended solids (TSS), scum, and sludge	Wastewater discharges to subsurface leach fields or seepage pits with excessive suspended solids, scum or sludge can clog the soil matrix. Excessive suspended solids, scum, or sludge may shield pathogenic organisms from disinfectants in disinfected effluents.
Biochemical oxygen demand (BOD)	A measurement of the concentration of biodegradable organic content in wastewater. The value represents the amount of oxygen required by microorganisms while oxidizing the waste constituents under aerobic conditions.
Pathogens	Pathogenic organisms such as parasites, bacteria, and viruses found in wastewater may be excreted by human beings and animals who are infected or carriers of disease. Pathogenic organisms can cause communicable diseases through direct and indirect body contact, or ingestion of contaminated water.
Nitrate	Nitrate is a chemical compound that results from oxidation of organic nitrogen and/or ammonia. Nitrate is a plant nutrient and a common constituent of oxidized wastewater. It is also a groundwater contaminant and when concentrations are high in drinking water, it poses a human health concern associated with methemoglobinemia.

Source: Adapted from US EPA 2005, Tchobanoglous and Burton 2003

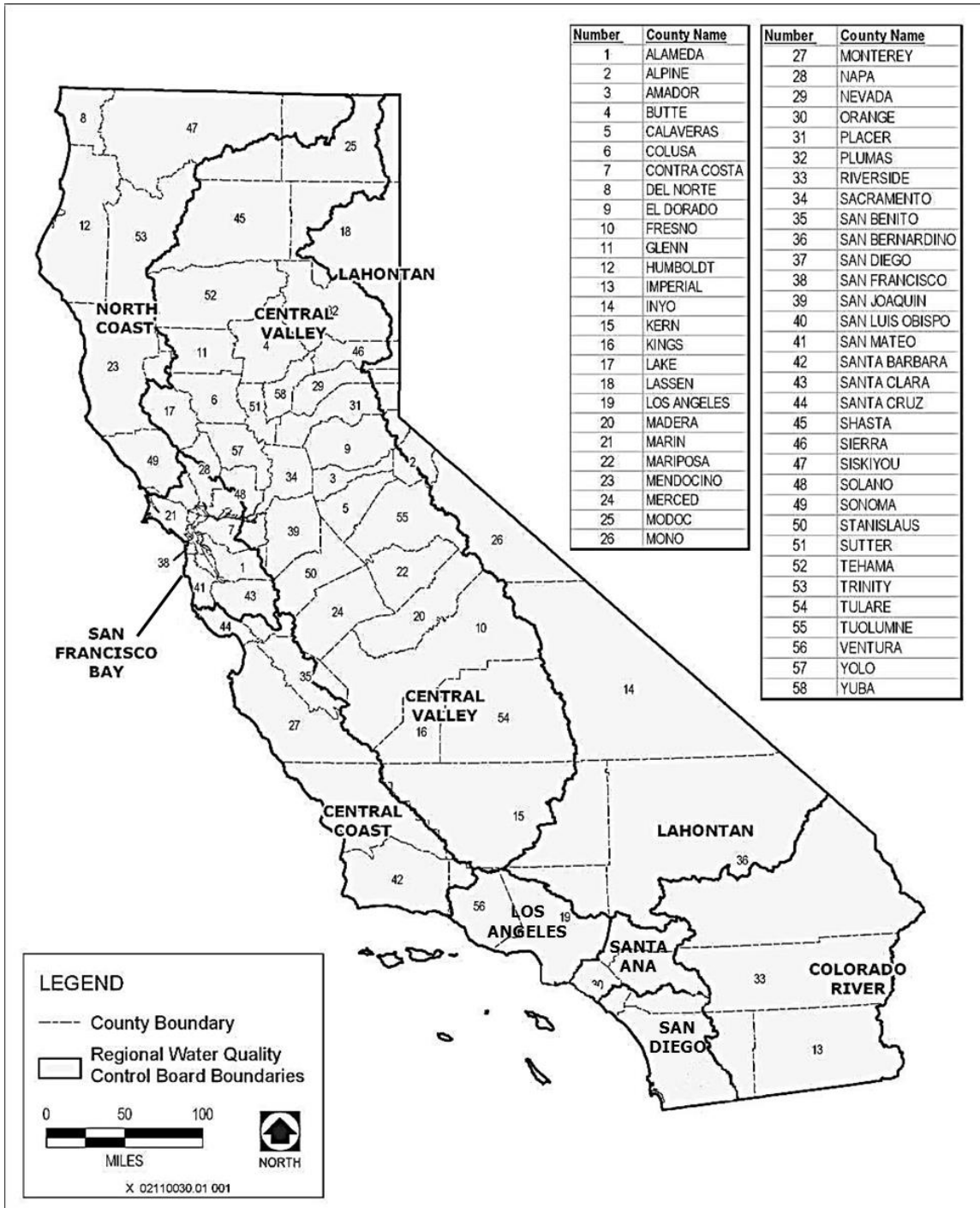


Figure 1 Regional Water Quality Control Boards and County Boundaries

2.2 Background

In 1997 the State Water Board issued a general Water Quality Order ([WQO-97-10-DWQ](#)) for land application of treated wastewater from small domestic systems with an average flow rate up to 20,000 gpd. The Regional Water Boards have relied upon WQO-97-10-DWQ as a baseline for permitting small domestic systems since 1997. Although WQO-97-10-DWQ remains valid, all WDRs are required to be reviewed periodically in accordance with Water Code section 13263(e).

2.3 Project Description

The State Water Board is preparing an updated General Order for land application of treated wastewater from small domestic systems that will be applicable statewide. The Regional Water Boards have discretion whether to enroll dischargers in the General Order, site-specific WDRs, or another administrative mechanism. The General Order will allow a monthly average flow rate up to 100,000 gpd (increased from 20,000 gpd) and will allow the use of recycled water consistent with title 22. Wastewater treatment systems will vary from septic tanks to activated sludge treatment facilities to pond facilities. The minimum level of treatment will be determined by [requirements of the General Order](#), Regional Water Board Basin Plans, title 22, and mitigation measures required by future site-specific CEQA evaluations. The General Order may be used by Regional Water Boards to streamline permitting of small domestic systems, which typically are a relatively low threat to groundwater quality. The systems covered by the General Order would discharge to land only; discharge to surface water bodies is prohibited.

The types of wastewater treatment systems that are typically employed for treatment of domestic wastewater can be generally described as follows:

- **Septic tanks and associated subsurface leach fields** provide the lowest level of acceptable treatment. The tank and leach field are generally below ground and covered with grass or similar shallow rooted vegetation. Depending on the source of wastewater and size of tank, the septic system may need to be pumped every one to five years.
- **Aerobic treatment units** are typically integrated in a treatment train with other wastewater treatment components. Aerobic treatment units provide air that is mixed with wastewater inside a treatment unit. Aerobic bacteria consume the organic matter in the sewage. Aerobic treatment units are also generally equipped with recirculation pumps and associated controls. A negligible amount of pump and air blower noise is generated. Aerobic treatment units require more frequent service and solids removal than a septic tank. Depending upon the source of wastewater, an aerobic treatment unit may require three or four visits per year by a septic pumping service.

- **Package treatment systems** typically use the activated sludge method to aerobically treat wastewater. Activated sludge systems must remove sludge waste regularly; therefore, sludge handling and storage equipment is needed. Package treatment systems can be installed outdoors or within a garage-sized building. Sludge is typically settled in clarifiers or small ponds. Sludge can be treated in a variety of ways. It can be dried before hauling, thickened to reduce the volume, or hauled with minimal treatment. Depending upon how sludge is stored and treated, it may require monthly removal. Activated sludge treatment systems employ pumps and air blowers, which result in a low level of noise.
- **Membrane Biological Reactor (MBR) (membrane bioreactor) systems** use the activated sludge method and then filter the oxidized wastewater using membrane technology. The process is similar to activated sludge, replacing the clarifier with membrane filtration. Similar to activated sludge, pumps and air blowers are required and sludge must be handled regularly. A low level of noise is associated with an MBR system.
- **Pond treatment systems** can be equipped with mechanical aerators or rely upon diffusion of atmospheric oxygen and/or oxygen generated by pond algae to oxidize waste constituents. Pond systems occupy the largest footprint of the treatment systems. Pumps and mechanical aerators generate low levels of noise, but pond systems are generally large enough that the noise is confined to the wastewater facility. Ponds can be subject to upset due to excessive BOD loadings, toxic discharges, or seasonal odor generation if thermally stratified ponds mix. Well operated systems typically do not generate objectionable odors.

The footprint of a disposal facility for treated wastewater will vary with the size of the discharge and disposal method. The smallest disposal facility is typically a leach field associated with a septic tank or aerobic treatment unit for private residences. In situations where soil type is unfavorable or high groundwater conditions exist, an at-grade or mound dispersal system may be used. Percolation ponds and land application of treated wastewater are generally employed at larger facilities with higher flow rates. Treated wastewater meeting title 22 requirements for recycled water can be used in various applications, such as crop/landscape irrigation, cooling towers, mixing concrete, etc.

Compliance with the General Order is documented by self-monitoring reports submitted to the Regional Water Board. This includes regularly reporting the results of observations and analytical data related to compliance. In addition, technical reports may be required to determine the effectiveness of the small domestic system.

3 Potential Environmental Impacts

3.1 Bioregion Environmental Setting

California is divided geographically into bioregions, classified by relatively large areas of land or water, which contain characteristic, geographically distinct assemblages of natural communities and species. The biodiversity of flora, fauna, and ecosystems that characterize a bioregion tend to be distinct from that of other bioregions.

California contains a wide variety of bioregions, from desert environments below sea level, to coastal areas, to alpine areas of 14,000 feet or more in elevation. The diversity of geography colliding with temperature and moisture leads to a significant diversity of biological resources. California has the highest total number of species and the highest number of endemic species within its borders than any other state. California also has the highest number of rare species (species typically listed under the federal Endangered Species Act [ESA] or the California ESA), and about one-third of those species are at risk, meaning these species have the potential for local or global extinction.

California is divided into 10 bioregions: Modoc, Klamath/North Coast, Sacramento Valley, Bay Area/Delta, Sierra, San Joaquin Valley, Central Coast, Mojave Desert, South Coast, and Colorado Desert (Figure 2).

3.1.1 Modoc Bioregion

This bioregion is also referred to as the Modoc Plateau and the Southern Cascade region. The Modoc Bioregion extends across California's northeast corner from Oregon to Nevada, and south to the southern border of Lassen County. The physical geography of the region includes flats, basins, valleys, lava flows, and mountains. High desert and forests are the dominant vegetation communities. Several major lakes (Goose, Eagle, and Tule) and Mount Lassen (10,450 feet in elevation) are dominant physical features. The bioregion shares many similarities with the Great Basin Bioregion that forms much of its eastern boundary. The area's large lakes provide critical habitat for migratory birds (United States Geological Survey [USGS] 2003).

Counties within this bioregion include all or portions of Plumas, Siskiyou, Butte, Tehama, Shasta, Lassen, and Modoc, which support relatively sparse population bases including the municipalities of Susanville and Alturas. This bioregion is comprised of the northern quarter of the Lahontan Hydrologic Region.



3.1.2 *Klamath/North Coast Bioregion*

The Klamath/North Coast Bioregion extends roughly one-quarter of the way down the 1,100-mile coast and east across the Coastal Ranges and into the Cascades. The region extends from the Oregon border to Point Arena and from the continental shelf to the Central Valley, including Mount Shasta (14,160 feet tall) near the eastern boundary. The region is one of rugged relief, with severely sheared, faulted, and folded mountains forming parallel ridges and river valleys. It also has coastal terraces, lagoons, and populated floodplains, as well as off-shore islands, estuaries, and subtidal deep-water habitats (USGS, 2003). The California bioregional classification system does not include offshore and tidal areas. The marine portion of this bioregion is within two categories of California's marine and ocean classification system: Southern Oregonian Province and Central Ocean (California Environmental Resources Evaluation System [CERES] 2005). Numerous rivers in this region offer spawning grounds for anadromous fish (e.g., salmon), including the Eel, Trinity, Klamath, Russian, Smith, Salmon, Scott, Mad, and Mattole Rivers. Large lakes include Clear Lake, Whiskeytown Lake, Clair Engle Lake, and the western part of Shasta Lake.

The region includes all or portions of 10 counties: Del Norte, most of Siskiyou, Humboldt, Trinity, Mendocino, Lake, and the northwestern portions of Shasta, Tehama, Colusa, and Glenn. The region's rugged and remote nature supports low population numbers. The largest city in the region is Eureka in Arcata Bay. This bioregion encompasses all of the North Coast Hydrologic Region.

3.1.3 *Sacramento Valley Bioregion*

This bioregion makes up the northern portion of California's Great Valley, extending south roughly from Redding in the north to the northern edge of the Sacramento-San Joaquin River Delta (Delta) at the confluence of the Sacramento and American Rivers. The eastern boundary spans the northern third of the Sierra Nevada foothills. The landscape is relatively flat, consisting of basins, plains, terraces, alluvial fans, and scattered hills or buttes.

Counties incorporated in this populated bioregion are Sutter, most of Sacramento and Yolo, and portions of Butte, Colusa, Glenn, Placer, Shasta, Tehama, and Yuba. Sacramento is the bioregion's largest city with other large cities including Redding, Chico, Davis, West Sacramento, and Roseville, making it the fourth most populous of the 10 bioregions. This bioregion covers a fraction of the Central Valley Hydrologic Region.

3.1.4 *Bay/Delta Bioregion*

The Bay/Delta Bioregion extends from the Pacific Ocean to the Sacramento Valley and San Joaquin Valley Bioregions to the northeast and southeast, and a short stretch of the eastern boundary joins the Sierra Bioregion at Amador and Calaveras Counties. The bioregion is bounded by the Klamath/North Coast Bioregion on the north and the Central Coast Bioregion to the south (CERES

2005). The marine and ocean areas are categorized as the Oceanic Bioregion and the northern portion of the Central Ocean Bioregion. These bioregions include two-thirds of California's coast, extending down to Point Conception north of Santa Barbara. The Bay/Delta Bioregion is one of the most populous, encompassing the San Francisco Bay Area and the Delta.

The bioregion fans out from San Francisco Bay in a jagged semi-circle that takes in all or part of 12 counties: Marin, Contra Costa, Santa Clara, Alameda, Solano, San Mateo, San Francisco, Sonoma, Napa, San Joaquin, and parts of Sacramento and Yolo. Major cities include San Francisco, Santa Rosa, Oakland, Berkeley, Vallejo, Concord, and San Jose. Though of moderate size, the Bay/Delta Bioregion is the second most populous bioregion. This bioregion contains portions of the San Francisco Bay and Central Valley Hydrologic Regions.

3.1.5 *Sierra Bioregion*

The Sierra Bioregion is named for the Sierra Nevada mountain range that is approximately 380 miles long and extends from the Feather River in the north to Tejon Pass in the Tehachapi Mountains to the south. The bioregion extends along California's eastern boundary and is largely contiguous with Nevada. It is bounded on the west by the Sacramento Valley and San Joaquin Valley Bioregions. Included in the region are the headwaters of 24 river basins extending to the foothills on the west side and the base of the Sierra Nevada escarpment on the east side (USGS 2003). These watersheds generate much of California's water supply provided by runoff from the Sierra snowpack.

Eighteen counties, or their eastern portions, make up the Sierra Bioregion: Alpine, Amador, Butte, Calaveras, El Dorado, Fresno, Inyo, Kern, Madera, Mariposa, Mono, Nevada, Placer, Plumas, Sierra, Tulare, Tuolumne, and Yuba. The larger cities include Truckee, Placerville, Quincy, Auburn, South Lake Tahoe, and Bishop (CERES 2005). This bioregion encompasses portions of the Lahontan, Central Valley, and Mojave Hydrologic Regions.

3.1.6 *San Joaquin Valley Bioregion*

The San Joaquin Valley Bioregion is bordered by the Coast Ranges on the west and the southern two-thirds of the Sierra Bioregion on the east. This bioregion is in the heart of California and is the state's top agricultural region, producing fruits and vegetables in its fertile soil.

Eight counties are found within the bioregion: Kings, most of Fresno, Kern, Merced, and Stanislaus and portions of Madera, San Luis Obispo, and Tulare. This growing bioregion, the third most populous, still contributes to the state's top 10 counties in farm production value (CERES 2005). Large communities include Fresno, Merced, Modesto, and Bakersfield.

3.1.7 *Central Coast Bioregion*

The Central Coast Bioregion includes marine, freshwater, and terrestrial resources. The bioregion extends some 300 miles from just north of the City of Santa Cruz to just south of the City of Santa Barbara, and inland to the floor of the San Joaquin Valley. The edge of the continental shelf forms the western boundary; on the east the region borders the Central Valley Bioregion. The marine and ocean areas are categorized as the Central Ocean Bioregion and the Southern California Bight. These marine regions extend from Cape Mendocino in the north to Point Conception in the south (CERES 2005).

The bioregion encompasses the counties of Santa Cruz, Monterey, San Benito, Santa Barbara, and portions of Los Angeles, San Luis Obispo, Fresno, Merced, Stanislaus, and Ventura. Large cities include Monterey, San Luis Obispo, and Santa Barbara. The bioregion also encompasses all of the Central Coast and Los Angeles Hydrologic Regions.

3.1.8 *Mojave Desert Bioregion*

The Mojave Desert Bioregion is located in southern California, southern Nevada, northeastern Arizona, and southwestern Utah. In California, the bioregion comprises the southeastern portion of the state, roughly east of the Sierra bioregion to the Transverse Ranges in the west, where this region abuts the Colorado Desert near Twentynine Palms. The geography is defined by widely separated mountain ranges and broad desert plains, and ranges in elevation from 280 feet below sea level in Death Valley National Park to over 11,000 feet on Telescope Peak. Much of the region is at elevations between 2,000 and 3,000 feet.

Seven counties make up the Mojave Bioregion: nearly all of San Bernardino, most of Inyo, the southeastern tips of Mono and Tulare, the eastern end of Kern, the northeastern desert area of Los Angeles, and a piece of northern-central Riverside County. The largest cities are Palmdale, Victorville, Ridgecrest, and Barstow (CERES 2005). The Mojave Desert Bioregion is within the southern portion of the Lahontan Hydrologic Region.

3.1.9 *Colorado Desert Bioregion*

The Colorado Desert Bioregion is the western extension of the Sonoran Desert found primarily in Arizona and Mexico. The region occupies the southeastern area of California to the border with Arizona and Mexico. It includes the Imperial Valley and Colorado River and abuts the South Coast Bioregion within the Peninsular Ranges. Elevation varies from 230 feet below sea level at the Salton Sea to over 8,000 feet in the Peninsular Ranges, but averages around 1,000 feet. The landform is typified by alluvial fans, bajadas, playas, dunes, desert plains and steep sparsely vegetated mountains. Average precipitation is around 4 inches per year (USGS 2003).

This sparsely populated bioregion encompasses all of Imperial County, the southeastern portion of Riverside County, the eastern end of San Bernardino County, and the eastern portion of San Diego County. Its most prominent cities are Palm Springs, Rancho Mirage, and El Centro (CERES 2005). This bioregion is completely within the Colorado River Hydrologic Region.

3.1.10 *South Coast Bioregion*

This bioregion encompasses terrestrial and marine resources from Point Conception on the north to the border with Mexico (USGS 2003). It extends from the outer edge of the continental shelf to the base of the Transverse and Peninsular Ranges. This bioregion is comprised of off-coast islands, narrow mountain ranges, broad fault blocks, alluvial lowlands, and coastal terraces. Elevation ranges from sea level to over 11,400 feet (San Geronimo Mountain). The aquatic resources include subtidal and intertidal marine and deep water habitats (USGS 2003). The California bioregional classification system does not include offshore and tidal areas; however, this region is defined within the California marine and ocean classification system as the Southern California Bight (CERES 2005).

Counties included in this region are Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura. This region is highly populated and continues to grow at a high rate (USGS 2003). This bioregion spans the San Diego, Santa Ana and Los Angeles Hydrologic Regions.

3.2 *Hydrology¹ Environmental Setting*

Most of California is within one hydrological region as defined by the United States Geological Survey (USGS), but that region is further divided into 153 hydrological cataloging units (moderate-sized watersheds). Since the ultimate determinants of the availability of surface and groundwater resource within the individual Regional Water Boards is the climatic pattern, this section provides a brief overview of the key hydrological elements for California.

3.2.1 *Precipitation*

There is relatively abundant precipitation in the state but the majority of the precipitation is concentrated in areas remote from most large urban centers and major agricultural areas. Much of the climatic variation in the state results from the patterns of global weather systems, oceanic influences, and the location and orientation of the mountains. As shown in Figure 3, northern California is much

¹ General hydrology descriptions were adapted from: Planert, M. and J.S. Williams. 1995. Groundwater Atlas of the United States: California, Nevada. HA 730-B. United States Geological Survey. USGS webpage: < http://pubs.usgs.gov/ha/ha730/ch_b/index.html >; CalWater. 1999. California Interagency Watershed Map of 1999.

wetter than southern California, with more than 70 percent of the average annual precipitation and runoff occurring in the northern part of the state. On average, about 75 percent of the annual precipitation in the state falls between November and March; with about 50 percent occurring between December and February. However, amounts of precipitation vary greatly from year to year, which can often make the services of surface water supplies undependable. The extreme northern part of California has slightly wetter summers than the rest of the state. Fog also occurs frequently on the coast and provides some additional moisture that is used primarily by vegetation.

3.2.2 *Runoff*

Runoff is the amount of water left from precipitation that can be measured as stream flow after losses to evaporation, transpiration by plants, and the replenishment of storage within the aquifers. The areal distribution of runoff closely follows the areal distribution of precipitation. Runoff is greatest in the mountains (exceeding 40 inches per year in many areas), where the majority of precipitation falls as snow that melts during the spring and runs off with minimal evapotranspiration. In contrast, the basins in the arid parts of southeastern California have virtually zero runoff because most precipitation is lost due to high rates of evaporation. However, high-intensity storms or rapid snowmelt in the mountains that border the basins may cause flash floods that reach the floors of the basins. Coastal areas have a direct relation between the amount of precipitation and runoff.

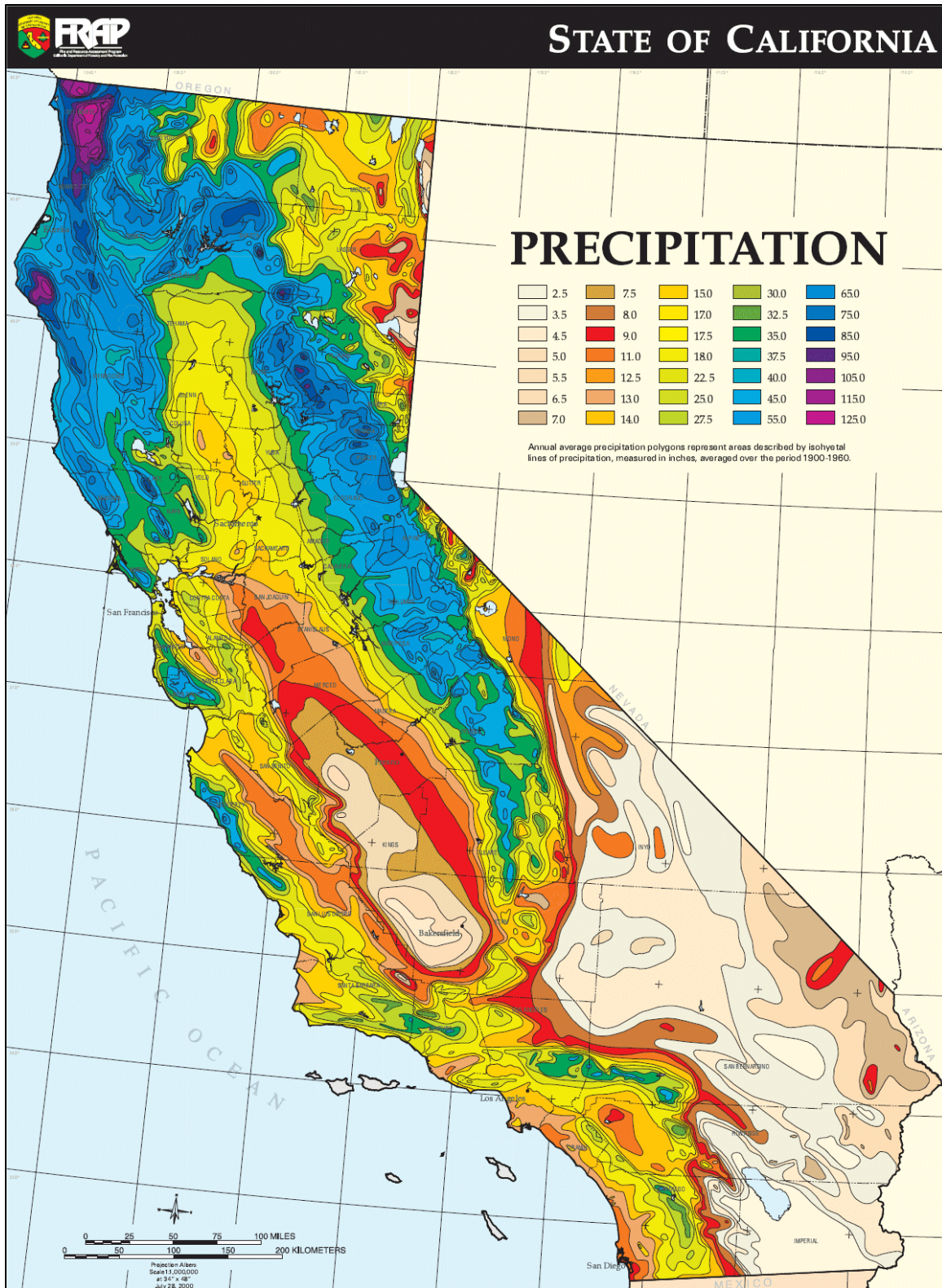


Figure 3 Annual Precipitation Rates in California (CDF, 2011)

3.2.3 *Water Surplus and Deficit*

The relation between precipitation and evapotranspiration is a major factor in water availability. If annual precipitation exceeds annual potential evapotranspiration, then there is a net surplus of water and stream flow is perennial. Water is available to recharge aquifers only at times when precipitation or snowmelt is greater than actual evapotranspiration. However, annual potential evapotranspiration can exceed annual precipitation, which causes a net deficit of water. A net annual moisture deficit is present almost everywhere in California except the northern California coast (which receives considerable rainfall from winter storms) and the mountainous regions of northern and east-central California.

In most of southern California, nearly all streams that arise in the mountains are ephemeral and lose flow to alluvial aquifers within a short distance of where the streams leave the mountains and emerge onto the valley floors. Before the inception of agriculture, the largest rivers in the vast Central Valley of California overflowed their banks during periods of peak winter flows and formed extensive marshlands. An elaborate flood control system and the lowering of the water table by withdrawals for irrigation now keep these rivers within their banks and have significantly affected the distribution of riparian wetlands.

3.3 *Hydrologic Regions of California*²

Hydrologists divide California into hydrologic regions (Figure 4). The Regional Water Boards are defined (for the most part³) by the boundaries of these hydrologic regions, as described in Water Code section 13200. Hydrologic regions are further divided into hydrologic units, hydrologic areas, and hydrologic subareas.

² Hydrologic region descriptions were adapted from: California's Groundwater, Bulletin 118, DWR 2003 and the Regional Water Board Basin Plans

³ The South Coast Hydrologic Region is divided among three Regional Water Boards (Los Angeles, Santa Ana, and San Diego) because it is the most populous area of the state.

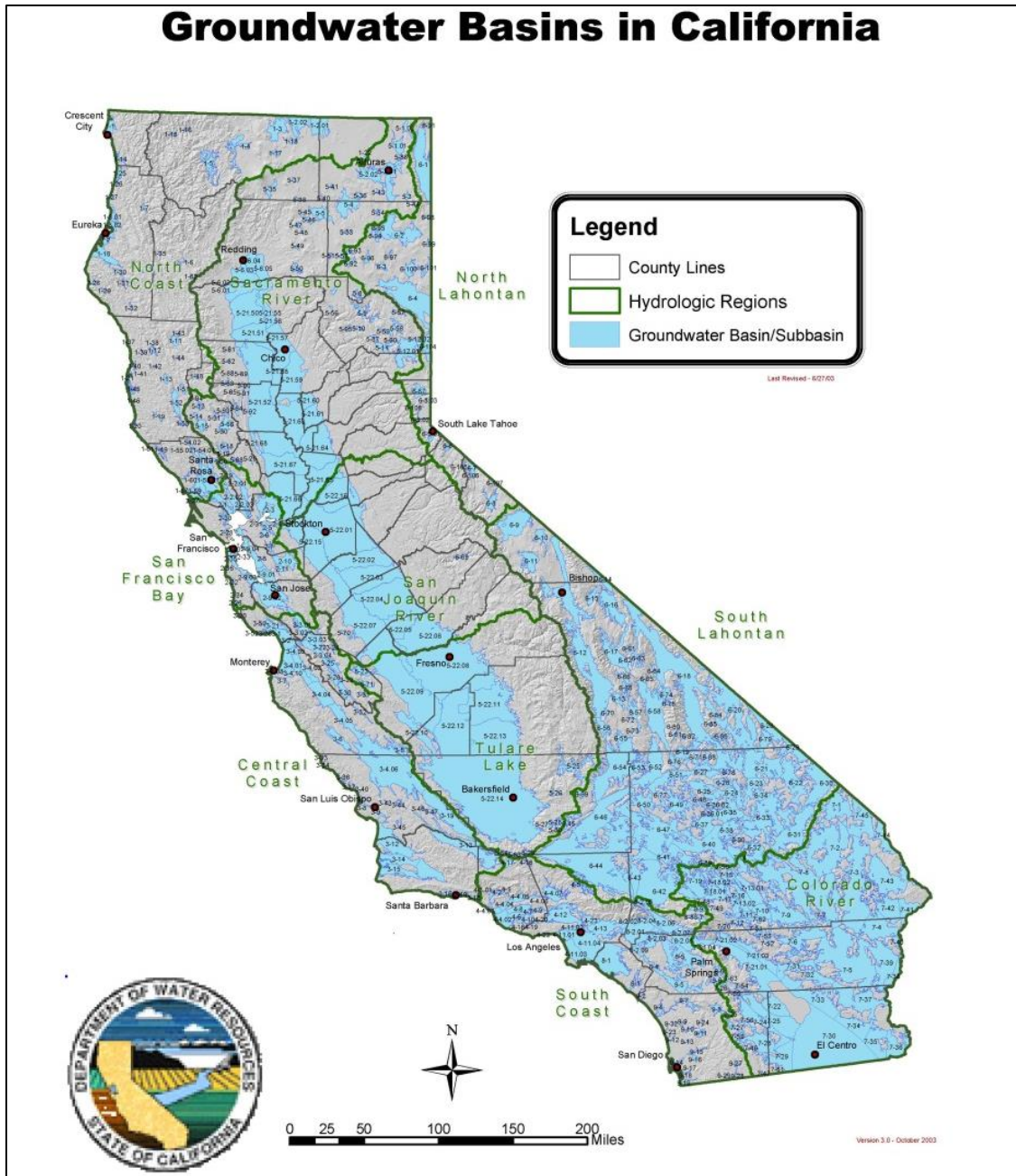


Figure 4 Hydrologic Regions and Groundwater in California (DWR, 2003)

3.3.1 North Coast Hydrologic Region

A majority of the surface water in the North Coast Hydrologic Region is committed to environmental uses because of the “wild and scenic” designation of most of the region’s rivers. Average annual precipitation in this hydrologic region ranges from 100 inches in the Smith River drainage to 29 inches in the Santa Rosa area.

Water bodies that provide municipal water include the Smith, Mad, and Russian Rivers. Areas providing agricultural water are more widespread than those for domestic, municipal and industrial use, as they occur in all of the hydrologic units within the region. Many of the smaller communities and rural areas are generally supplied by small local surface water and groundwater systems. Water recreation occurs in all hydrologic units on both fresh and salt water, attracting over ten million people annually. Coastal areas receiving the greatest recreational use are the ocean beaches, the lower reaches of rivers draining to the ocean, and Humboldt and Bodega Bays. The Russian, Eel, Mad, Smith, Trinity, and Navarro Rivers and Redwood Creek provide the most freshwater recreational use.

Groundwater aquifers in the northeastern portion of the North Coast Hydrologic Region consist primarily of volcanic rock aquifers and some basin-fill aquifers. Coastal basin aquifers are predominantly found in the southern portion of this hydrologic region and along the northern coast. In general, though, a large percentage of this region is underlain by fractured hard rock zones that may contain localized sources of groundwater.

3.3.2 San Francisco Bay Hydrologic Region

Major rivers in the San Francisco Bay Hydrologic Region include the Napa and Petaluma, which drain to San Francisco Bay. Although this is the smallest hydrologic region in the state, it contains the second largest human population. Coastal basin aquifers are the primary type of aquifer system in this region. These aquifers can be found along the perimeter of San Francisco Bay extending southeast into the Santa Clara Valley, as well as in the Livermore Valley. The northeastern portion of this region, which includes the eastern Sacramento–San Joaquin Delta, is underlain by a portion of the Central Valley aquifer system. The remaining areas in this region are underlain by fractured hard rock zones.

3.3.3 Central Coast Hydrologic Region

Groundwater is the primary source of water in the Central Coast Hydrologic Region, accounting for approximately 75 percent of the annual supply. Most of the freshwater in this region is found in coastal basin aquifers, with localized sources of groundwater also occurring in fractured hard rock zones throughout the region.

3.3.4 South Coast Hydrologic Region

The South Coast Hydrologic Region is divided among three Regional Water Boards because it is the most populous area of the state: Los Angeles, Riverside, and San Diego. Groundwater supplies approximately 23 percent of the region's water in normal years and about 29 percent in drought years. Like the Central Coast Hydrologic Region, the majority of aquifers in this region are coastal basin aquifers. In the eastern central portion of the region, there lies a

small section of basin-fill aquifer and the remainder of the region is comprises fractured hard rock zones.

3.3.5 *Central Valley Hydrologic Region*

The Central Valley Hydrologic Region is the largest in California, and encompasses the three subregions described below.

3.3.6 *Sacramento River Hydrologic Subregion*

The Sacramento River Hydrologic Subregion includes the entire drainage area of the Sacramento River, the largest river in California, and its tributaries. Groundwater in the northern half of this hydrologic subregion is, for the most part, contained in volcanic rock aquifers and some basin-fill aquifers. The southwestern half of this subregion is underlain by part of the Central Valley aquifer system. The remaining areas that comprise the southeastern half of the subregion and portions of the northern half of the subregion are underlain by fractured hard rock zones. Surface water quality in this hydrologic subregion is generally good. Groundwater quality in the Sacramento River subregion is also generally good, although there are localized problems.

3.3.7 *San Joaquin River Hydrologic Subregion*

A portion of the Central Valley aquifer system underlies nearly the entire eastern half of the San Joaquin River subregion, while the western half of this subregion consists of fractured hard rock zones. The groundwater quality throughout this hydrologic region is generally good and usable for most urban and agricultural uses, although localized problems occur.

3.3.8 *Tulare Lake Hydrologic Subregion*

A small area at the southern end of the Tulare Lake subregion is underlain by basin-fill aquifers, while a majority of the western half is underlain by a portion of the Central Valley aquifer system. The eastern half, once again, consists of fractured hard rock zones.

3.3.9 *Lahontan Hydrologic Region*

The Lahontan Hydrologic Region encompasses two subregions: the North Lahontan and the South Lahontan.

3.3.10 *North Lahontan Hydrologic Subregion*

The North Lahontan Hydrologic Subregion consists of the western edge of the Great Basin, and water in the region drains eastward toward Nevada. Groundwater in the northern half of this subregion is primarily contained in basin-fill and volcanic rock aquifers, with some fractured hard rock zones. The southern half of this region is dominated by fractured hard rock zones, but small segments of basin-fill aquifers also exist in this part of the subregion. In general, the water quality in the North Lahontan Hydrologic Subregion is good. In basins

in the northern portion of the region, groundwater quality is widely variable. The groundwater quality along these basin margins tends to be of higher quality, but the potential for future groundwater pollution exists in urban and suburban areas where single-family septic systems have been installed, especially in hard rock areas. Groundwater quality in the alpine basins ranges from good to excellent.

3.3.11 *South Lahontan Hydrologic Subregion*

The South Lahontan Hydrologic Subregion is bounded on the west by the crest of the Sierra Nevada and on the north by the watershed divide between Mono Lake and East Walker River drainages; on the east by Nevada and the south by the crest of the San Gabriel and San Bernardino mountains and the divide between watersheds draining south toward the Colorado River and those draining northward. The subregion includes all of Inyo County and parts of Mono, San Bernardino, Kern, and Los Angeles Counties.

The South Lahontan Hydrologic Subregion contains numerous basin-fill aquifers, separated by fractured hard rock zones. Although the quantity of surface water is limited in the South Lahontan Hydrologic Subregion, the quality is very good, being greatly influenced by snowmelt from the eastern Sierra Nevada. However at lower elevations, groundwater and surface water quality can be degraded, both naturally from geothermal activity, and as a result of human-induced activities. Drinking water standards are most often exceeded for TDS, fluoride, and boron content. Groundwater near the edges of valleys generally contains lower TDS content than water beneath the central part of the valleys or near dry lakes.

3.3.12 *Colorado River Hydrologic Region*

The southeast portion of California consists of the Colorado River Hydrologic Region. It includes a large portion of the Mojave Desert and has variable arid desert terrain that includes many bowl-shaped valleys, broad alluvial fans, sandy washes, and hills and mountains. Aquifers in this region are nearly all of the basin-fill type.

3.4 Environmental Checklist

The State Water Board has prepared this Initial Study to evaluate foreseeable environmental impacts and determine if a significant impact to the environment is likely as a result of adopting the General Order. The adoption of the General Order is for statewide application and does not address a specific site. The subsequent evaluation of the environmental factors only considers potential environmental impacts that may result from construction and operation of typical small domestic systems instead of systems with specific types and locations.

Discharge of wastewater from small domestic systems can create environmental risks to groundwater quality and public health. The General Order contains

requirements that reduce the potential risks to “less than significant impact” or “no impact” levels. However, the potential environmental impacts of projects regulated under the General Order are foreseeable only to a limited extent. Additional environmental review will be performed by local agencies for new or expanding wastewater systems.

Wastewater treatment systems are constructed as a result of factors unrelated to the adoption of the General Order. The effect of the State Water Board’s discretionary action adopting the General Order is that permitting will occur under the General Order instead of under individual WDRs. To the extent a project is not consistent with the General Order, or additional requirements are determined to be necessary, the Regional Water Boards can prepare site-specific WDRs.

PROJECT INFORMATION	
Project Title:	General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems
Lead agency name and address:	State Water Resources Control Board Division of Water Quality P.O. Box 100 Sacramento, CA 95812
Contact person and phone number:	Timothy O’Brien Waste Discharge to Land Program (916) 341-6904
Project Location:	Statewide
Project sponsor’s name and address:	State Water Resources Control Board Division of Water Quality, P.O. Box 100 Sacramento, CA 95812
General plan description:	Not Applicable
Zoning:	Not Applicable
Description of project:	See chapter 2.3 Project Description
Surrounding land uses and setting; briefly describe the project’s surroundings:	Statewide
Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements):	None

3.4.1 *Aesthetics*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

Less than Significant Impact. New or expansion of small domestic systems could be installed in a variety of settings in many areas of California, including scenic areas. Depending on the treatment system, components, footprint, and construction activities, the potential for impact will vary greatly.

The smallest wastewater systems are septic systems, which are typically located underground and in close proximity to the structure where the wastewater originates. Aerobic treatment units will typically have an additional tank, but are similar to septic tanks. A low profile, above ground box is used to enclose pump controls, air blower, pump, and miscellaneous valves. Any above ground components have a low profile and wastewater disposal in leach fields are covered with shallow rooted plants that do not obstruct views. Leach fields are sized depending upon the discharge rate, but are unlikely to affect a scenic vista.

Moderate sized systems may include additional treatment such as activated sludge package plants or recirculating sand filters. In most cases, the components are constructed at least partially below ground or within a structure to limit public access. Moderate sized systems are generally constructed in close proximity to developed areas, but their relative size to treatment capacity allows them to be concealed within garage sized buildings or behind fenced areas and sightline screening vegetation.

Wastewater pond systems require the largest footprint. As a result, pond systems are located farther from developed areas where real estate is less expensive. Property values are generally higher if the property includes a scenic vista; this makes pond systems less likely to be constructed impacting a scenic vista, where a scenic vista exists.

A project specific CEQA evaluation will be required for new and expanding wastewater systems seeking coverage under this General Order. The issue of scenic vistas will be evaluated on a site-specific basis. Siting criteria of the local authority will continue to establish appropriate locations for new structures or modifications to existing structures on a site-specific basis. Many local agencies have ordinances in place establishing standards for construction within scenic areas. The General Order will not affect those requirements. As site-specific issues are identified, site-specific mitigation would be developed if needed. The General Order will have a less than significant impact on a scenic vista.

- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less than Significant Impact. See the response to item (a) above. There are currently 1260.7 miles of state designated scenic highway resources. Although the facilities covered by the General Order could be constructed within the view shed of scenic highways, federal, state and local regulations would prohibit these facilities from being constructed within highway rights-of-way. Because above ground portions of these facilities would be relatively low-profile and would be located outside of highway rights-of-way, impacts to scenic highways would be less than significant. The nature of these facilities would also preclude construction in or on historic buildings and rock outcroppings.

- c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than Significant Impact. See the response to item (a) above.

- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. Permanent sources of external lighting are not a feature of small domestic systems. If security lighting is needed, it can be shielded to prevent substantial light or glare. Security lighting, if used, would typically be required by the local land-use authority. This issue would be addressed during the site-specific evaluation of individual projects by the local authority. Adoption of the General Order will not create new sources of

light or glare. The General Order will have a less than significant impact on day or night time views in the area.

3.4.2 Agriculture Resources

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p>II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
<p>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Pub. Resources Code § 12220(g).), timberland (as defined by Pub. Resources Code § 4526), or timberland zoned Timberland Production (as defined by Gov. Code § 51104(g).)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>d) Result in the loss of forest land or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the

Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less than Significant Impact. Installation of new or expanding wastewater systems could occur on a wide variety of soil types throughout the state, including areas that could be categorized under the Farmland Mapping and Monitoring Program as Farmland of Statewide Importance and Prime or Unique Farmland. The General Order does not cover systems designed to treat agricultural waste. Any systems constructed on agricultural land would be incidental to the residential uses associated with farm operations. Therefore, systems constructed on agricultural lands would be relatively small and would allow continued use of the land for agricultural purposes.

Because site-specific projects have not been determined, this evaluation does not address site-specific impacts. The potential for converting farmland is impossible to determine. However, wastewater systems are constructed or expanded to address a population need. Therefore, conversion of farmland to other uses would be a necessary precursor to wastewater system construction. The General Order does not change zoning or land use designation, and will not alter the economics of farmland conversion to other uses. Prior to conversion of farmland to other uses, entitlements would be required by local land use authorities, and a project specific CEQA evaluation would be performed which would address any new or expanding wastewater system seeking coverage under the General Order. The issue of farmland conversion will be evaluated on a site-specific basis as these projects are identified. The potential impacts of the General Order on such farmland are considered less than significant.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

Less than Significant Impact. The adoption and implementation of the General Order will not affect zoning designations or a Williamson Act contract established by local land use jurisdictions. Although construction of small domestic systems could occur within land zoned for agriculture and land with existing Williamson Act contracts, the General Order does not affect zoning or Williamson Act contracts. Such conflicts would require zoning modifications, additional entitlements, and/or changes in Williamson Act contracts. This would then require discretionary action by local land use authorities, and would require the preparation of site-specific environmental documents that analyze these impacts.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Pub. Resources Code, § 12220(g)), timberland (as defined by Pub. Resources Code, § 4526), or timberland zoned Timberland Production (as defined by Gov. Code, § 51104(g))?

Less than Significant Impact. The adoption and implementation of the General Order will not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Any conflicts with or conversion of existing zoning would require site-specific project approvals by local land use authorities. See the response in (a) and (b) above.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Less than Significant Impact. Installation of new or expanding wastewater systems could occur on a wide variety of soil types throughout the state, including forest land. Wastewater systems are constructed or expanded only to address a population need. Therefore, loss of forest land or conversion of forest land to non-forest use to other uses would be a necessary precursor to wastewater system construction. Adopting the General Order does not change zoning or land use designation, and will not alter the economics of forest land conversion to other uses. Prior to conversion of forest land to other uses, entitlements would be required by local land use authorities, and a project specific CEQA evaluation would be performed, which would include any new or expanding wastewater systems seeking coverage under the General Order. The issue of loss or conversion of forest land will be evaluated on a site-specific basis as these projects are identified. The potential impacts of the General Order on such forest land are considered less than significant.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less than Significant Impact. See the response to item (a) and (d) above.

3.4.3 Air Quality

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Section 3: Potential Environmental Impacts

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

a) Conflict or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. Although this evaluation does not address project specific impacts, the potential for conflict or violation of an air quality plan is low. Nearly all equipment at a small domestic system is powered by electricity. Emergency generators powered by stationary internal combustion engines that exceed a horsepower rating (typically 50 HP) must be permitted by local air quality management districts. Emergency electrical generators are typically required at wastewater systems to power essential equipment as a backup power source. The use of emergency equipment is generally limited to short-term uses. The additional air quality impacts caused by these systems would be negligible and the overall air quality impacts caused by the uses for which the systems would serve would be analyzed by the local land use authority permitting agency.

Because the General Order does not address (or approve) any specific wastewater system, construction related air quality impacts cannot be accurately determined. However, construction of such systems generally requires very few construction vehicles. Construction related air quality impacts are expected to be minor, and would be temporary. As specific systems are identified, site-specific environmental review will be conducted which will consider any additional air quality impacts not addressed in this document. The General Order would result in less than significant impacts to implementation of an applicable air quality plan.

- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant Impact. See the response to item (a) above.

- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact. See the response to item (a) above. Areas throughout the state are in non-attainment for various criteria pollutants. Air quality impacts are expected to be negligible; therefore, cumulative impacts would be less than significant. However, specific air quality impacts cannot be determined because the General Order does not address (or approve) any specific wastewater system. As specific systems are identified, site-specific environmental review will be conducted which will consider any additional air quality impacts not addressed in this document.

- d) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. See the response to item (a) above.

- e) Create objectionable odors affecting a substantial number of people?

Less than Significant Impact. Well operated wastewater systems do not generally produce objectionable odors. However, overloaded treatment systems may generate odors if subjected to upset due to excessive BOD loading, toxic discharges, or seasonal odor generation if thermally stratified ponds mix. The General Order does not allow the construction of new overloaded systems, and can alleviate some existing areas of objectionable odors by facilitating the construction of new and upgraded systems to replace older, overloaded or failing systems. The General Order requires that nuisance odors not be perceivable beyond the limits of the small domestic system. The General Order will have a less than significant impact in creating objectionable odors affecting a substantial number or people.

3.4.4 *Biological Resources*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish (DFG) and Game or U.S. Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact. The General Order limits the wastewater discharge to monthly average flow rate up to 100,000 gallons per day; therefore, it addresses relatively small wastewater systems that will consist of limited areal extent facilities. Based on the small size of the wastewater systems, a substantial adverse effect on biological resources is unlikely.

However, due to the great number of special status species throughout the state, impacts will be evaluated on a case-by-case basis. As individual facilities are proposed for construction, siting would be evaluated by local land use authorities, and site-specific biological resources would be identified. Project specific CEQA analysis will be performed. Adoption of the General Order will not have a substantial adverse effect on any candidate, sensitive, or special status species.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

Less than Significant Impact. See the response to item (a) above.

- c) Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact. Because the discharge is limited to land, projects are unlikely to impact federally protected wetlands. In addition, see the response to item (a) above.

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact. See the response to item (a) above.

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact. A project specific evaluation will be prepared for a new or expanding wastewater system. The General Order does not address, preempt, or supersede the authority of local policies or ordinances protecting biological resources. Therefore, conflicts with such plans, policies or ordinances are unlikely to occur.

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than Significant Impact. See the response to items (a and c) above.

3.4.5 Cultural Resources

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA section 15064.5?

Less than Significant Impact. Adoption of the General Order will not have a substantial adverse effect on any historical resources. However, specific projects seeking coverage under the General Order may have the potential to adversely affect historical resources. All future actions must comply with the CEQA process and requirements for tribal consultation provided by Senate Bill (SB) 18, chapter 905, signed in 2004, and Government Code section 65352 during the project approval process by the local authority. SB 18 refers to “places, features, and objects” (Pub. Resources Code §5097.9 and §5097.993). Required actions involving construction already include a thorough search of records, published literature, and databases, to avoid and minimize potential impacts to identified cultural resources. This is expected to ensure the implementation of any necessary site-specific actions to avoid, minimize and mitigate any impacts to significant historical, archaeological, and paleontological resources or sites, or unique geological features.

- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA section 15064.5?

Less than Significant Impact. See the response to item (a) above.

- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact. See the response to item (a) above.

- d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact. Adoption of the General Order will not have a substantial adverse effect on any human remains. However, specific projects seeking coverage under the General Order may have the potential to encounter human remains during construction activities. Upon discovery of human remains, project proponents will need to comply with Health and Safety Code section 7050.5 and Public Resources Code section 5097.98. Compliance with state law will reduce potential impacts to less than significant levels.

3.4.6 Geology / Soils

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section 3: Potential Environmental Impacts

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to division of Mines and Geology Special Publication 42.

Less than Significant Impact. Adoption of the General Order will not have a substantial adverse effect caused by geologic or soil conditions. In general, there are few employees at a wastewater facility so the exposure to people or structures from seismic related events is generally small. Many small wastewater systems are not regularly staffed. Based on the structures that are typical at small domestic systems (typically single story wood frame without masonry chimneys), substantial adverse effects including risk of loss, injury, or death are unlikely. A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the issue of geologic or soils hazards will be evaluated on a site-specific basis at that time. In addition, the siting criteria of the local agencies will establish appropriate locations and seek to avoid or minimize, on a site-specific basis, any potential for risk to people or structures. The General Order will have a less than significant impact to exposure of people or structures to potential adverse effects, including the risk of loss, injury, or death associated with earthquake faults.

- ii) Strong seismic ground shaking?

Less than Significant Impact. See the response to item (a)(i) above.

- iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact. See the response to item (a)(i) above.

iv) Landslides?

Less than Significant Impact. See the response to item (a)(i) above.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Some facilities permitted under the General Order are likely to apply wastewater to a land application area (LAA). Some of those facilities may allow stormwater to run off the LAA; however, wastewater will not be applied at that time, reducing the amount of water available to erode soil. In addition, erosion is unlikely to occur due to the limited areal extent of an LAA, stormwater falling on the surrounding area is typically diverted around the LAA, and most LAAs are cropped, which provides stabilizing turf or plant roots reducing erosion.

A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the issue of potential soil erosion or the loss of top soil due to water runoff will be evaluated on a site-specific basis at that time. The General Order itself will have a less than significant impact to cause soil erosion.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. See the response to item (a)(i) above.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less than Significant Impact. Adoption of the General Order will not have a substantial adverse effect caused by expansive soils creating substantial risks to life or property. Based on the structures that are typical at small domestic systems, substantial adverse effects including risk of loss, injury and death are unlikely. A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the issue of expansive soil will be evaluated on a site-specific basis at that time. The General Order itself will result in a less than significant impact associated with geology and soils.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Less than Significant Impact. The General Order requires adequate wastewater disposal capacity. Guidance for septic tank leach field design is provided in the General Order, and wastewater systems with a flow rate above 3,500 gpd must be designed by a California licensed professional engineer. Soils at the project location must be adequate to support the wastewater project construction.

3.4.7 Greenhouse Gas Emissions

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VI. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant-Impact. Construction of a wastewater system involves the use of heavy equipment for hauling, excavation, etc. However, the construction phase is of limited duration and would typically require few construction vehicles at any given time; therefore, it would not create a significant impact on the environment. Wastewater disposal facilities are generally constructed to serve existing area population, and would not increase area population or traffic.

Operation of a small domestic system will result in generation of some greenhouse gas (GHG) emissions. The primary gasses of concern produced are carbon dioxide (CO₂) and methane (CH₄). Minimal amounts of hydrogen sulfide (H₂S) may be generated if the treatment process is upset. The amount of gas produced varies depending upon treatment technology, operation and maintenance practices, and the disposal of residual waste material. Disposal of solids may temporarily make them unavailable to the atmosphere, but all disposal or reuse techniques eventually allow the CO₂ and/or CH₄ to recycle back into the atmosphere.

Operation of a small domestic system normally uses electricity for pumps and

mechanical aerators. Because operators pay for electricity based on usage, they are incentivized to employ efficient practices wherever possible.

Currently, most air basins in California are in non-attainment for ozone (i.e., the standard was violated during the latest three-year period), and only a small portion of the Mojave Desert Air Basin (in San Bernardino County) is in non-attainment for H₂S emissions (California Air Resources Board [CARB], 2012). Although CH₄ is acknowledged to be a GHG and a significant contributor to climate change, it is not a criteria pollutant regulated by air basins in California.

Although small domestic systems contribute a small amount of GHGs, the General Order will not affect the number of systems or the volume of wastewater discharged to the systems. Many of these systems are already covered by the existing WQO-97-10-DWQ. The proposed General Order will not contribute to cumulative air quality impacts. Other sources of air emissions, such as transportation, industrial activities, and power generation, are the major contributors to significant cumulative air quality impacts. A project-specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the issue of greenhouse gas generation will be evaluated on a site-specific basis at that time.

- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. The proposed project would not affect applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses. In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012.

To effectively implement the cap, AB 32 directs the California Air Resources Board (CARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 (which regulates GHG emissions from vehicles, but is currently the subject of litigation) should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions.

SB 97, signed in August 2007, acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. This bill directed the California Office of Planning and Research (OPR) to prepare, develop, and transmit guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions to the California Resources Agency. OPR developed a technical advisory suggesting relevant ways to address climate change in CEQA analyses. The technical advisory also lists potential mitigation measures, describes useful computer models, and points to other important resources. In addition, amendments to CEQA guidelines implementing SB 97 became effective on March 18, 2010.

Previously adopted state regulations include AB 1493, which requires that CARB develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state.” In 2005, Executive Order No. S-3-05 was signed by Governor Schwarzenegger stating that GHG emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050. Executive Order No. S-3-05 directed the Secretary of the California Environmental Protection Agency to coordinate a multi-agency effort to reduce GHG emissions to the target levels.

3.4.8 *Hazard & Hazardous Materials*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	with Mitigation	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS:				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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ENVIRONMENTAL FACTOR	Potentially Significant Impact	with Mitigation	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. Adoption of the General Order will not have the potential to create hazards or hazardous materials, or create a significant hazard to the public or the environment through routine transport use, or disposal of hazardous materials.

It is anticipated that most small domestic systems will not store hazardous materials. However, some systems may be required to disinfect wastewater. That activity may be associated with the use and storage of hazardous materials. In general, these systems employ liquid sodium hypochlorite as a disinfectant rather than chlorine gas, largely due to the safety concerns and cost of maintaining chlorine gas for that activity. Less frequently, wastewater systems are required to adjust pH which may require storage of acid or base chemicals. Local authorities may limit the volume and means of on-site storage for such chemicals through the provisions of California Building Code.

A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the issue of hazards and hazardous materials will be evaluated on a site-specific basis at that time.

Hazardous materials are defined and regulated under several federal and state statutes and associated regulations. The General Order does not

change any regulations pertaining to hazardous materials. The General Order will have less than significant impact to the public or the environment through the routine transport, use, or disposal of hazardous materials.

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. See the response to (a) above.

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. See the response to (a) above.

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less than Significant Impact. See the response to (a) above.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Less than Significant Impact. The General Order would not add population or housing to areas. Small domestic systems may be located in the vicinity of an airport or airstrip, but they would not add substantial numbers of employees or any residents to these areas. The General Order would not otherwise create safety hazards within the vicinity of an airport or airstrip.

- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Less than Significant Impact. See the response to (e) above.

- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. See the response to (a) above.

- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less than Significant Impact. The General Order would not add population or housing to wildland areas nor would the small domestic facilities covered by the General Order create any new significant fire risk within wildland areas.

3.4.9 Hydrology / Water Quality

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary Map or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Be subject to inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

a) Violate any water quality standards or waste discharge requirements?

Less than Significant Impact. Adoption of the General Order will not violate any water quality standards or waste discharge requirements. The General Order will be implemented by the Regional Water Boards and compliance with the appropriate Basin Plan is required. [The General Order requires a discharger seeking enrollment to design an appropriate method of wastewater treatment based on site-specific conditions. Discharges of higher strength wastewater or discharges to sensitive environments may be required to meet nitrogen effluent limits.](#)

[If the proposed discharge would not be protective of water quality, Basin Plan requirements, or other requirements \(such as those contained in California Code of Regulations, titel 22 related to recycled water\), additional treatment of the wastewater would be required before allowing the discharge. Alternatively, a Regional Water Board can issue site-specific WDRs for a discharge that addresses potential impacts from a proposed discharge.](#)

[Occassional WDR violations or accidental discharges could occur if the treatment systems do not function properly, but monitoring provisions imposed by the Regional Water Boards would be expected to identify such circumstances so that they can be corrected.](#)

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less than Significant Impact. Adoption of the General Order will not have a significant impact to groundwater supplies or recharge.

In some cases, the source water for a community will be groundwater; therefore, pumping groundwater has the potential to affect the groundwater

supply. The General Order does not change zoning or land use designation, and would not alter the economics of converting land to residential uses, so the General Order will not increase residential development and associated groundwater extraction. However, irrigation of landscaped areas or crops at LAAs with treated wastewater (recycled water) will replace water that may otherwise have been used for that purpose. A less than significant impact to groundwater recharge is anticipated as a result of adoption of the General Order.

A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the issue of groundwater supply and/or recharge impacts will be evaluated on a site-specific basis at that time.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Less than Significant Impact. Small domestic systems are not typically constructed in drainage areas that would require changing the course of a stream or river. Construction activity will be performed consistent with a construction stormwater permit to minimize erosion and siltation issues.

- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less than Significant Impact. See the response to item (c) above.

- e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact. Small domestic systems that can be covered under the General Order typically contain the stormwater that falls on the facility footprint. Some systems may allow stormwater that falls on an LAA to run off seasonally (only disinfected wastewater may be applied to those LAAs). In most cases, wastewater will be reapplied to the LAA to maximize infiltration before stormwater is allowed to discharge off-site. Because all wastewater is treated prior to land application, and wastewater is contained in treatment systems at the wastewater facility, discharge of polluted runoff is unlikely to occur.

- f) Otherwise substantially degrade water quality?

Less than Significant Impact. The General Order requires the discharge to comply with the applicable Regional Water Board's Basin Plan, not pollute groundwater or surface water, or negatively impact any beneficial use.

- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary Map or Flood Insurance Rate Map or other flood hazard delineation map?

Less than Significant Impact. The General Order does not address or modify local zoning, which determines acceptable housing locations; therefore, the General Order would not result in housing or other structures being placed within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary Map, Flood Insurance Rate Map, or other flood hazard delineation map.

- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Less than Significant Impact. The General Order covers small domestic systems only, and does not address the construction of new housing or other major structures. Small domestic systems covered by the General Order might be constructed within 100-year flood hazard areas; however, they would typically not include large above-ground structures which would impede or redirect flood flows within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary Map, Flood Insurance Rate Map, or other flood hazard delineation map.

A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the issue of flood hazard area impacts will be evaluated on a site-specific basis at that time.

- i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less than Significant Impact. Adoption of the General Order is not expected to expose people or structures to a significant risk involving flooding. Some wastewater systems will use wastewater ponds either as treatment or storage facilities. In most cases, the ponds will be relatively small and outside the jurisdictional size limits of the DWR Division of Safety of Dams. For new or expanding wastewater systems that employ ponds, a technical report prepared under the supervision of a California licensed civil engineer is required as part of the application process for coverage under the General Order. Because the General Order addresses only small domestic systems, ponds associated with these systems will also be relatively small.

A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the issue of flood hazard will be evaluated on a site-specific basis at that time.

- j) Be subject to inundation by seiche, tsunami, or mudflow?

Less than Significant Impact. The General Order does not address local zoning, which determines acceptable facility locations; therefore, the General Order would not result in small domestic treatment systems being placed within a location subject to inundation by seiche, tsunami, or mudflow.

A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the issue of inundation by seiche, tsunami, or mudflow will be evaluated on a site-specific basis at that time.

3.4.10 Land Use / Planning

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

a) Physically divide an established community?

Less than Significant Impact. The General Order addresses wastewater collection, treatment, and disposal, which would provide a necessary service for existing or planned and permitted communities. A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; any issues, such as placement of a new or expanding system that physically divide an established community, will be evaluated on a site-specific basis at that time. Furthermore, the General Order is unlikely to conflict with another agency’s plan, and does not address zoning or land use designations.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact. Adoption of the General Order is not expected to conflict with any applicable land use plan, policy, or regulation. The General Order is consistent with policies of the State Water Board and Regional Water Boards. A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the issues will be evaluated on a site-specific basis at that time. However, the General Order is unlikely to conflict with another agency’s plan and does not address zoning or land use designations. Such changes would require entitlements from local land use authorities.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Less than Significant Impact. See the response to item (b) above.

3.4.11 *Mineral Resources*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Less than Significant Impact. Adoption of the General Order is not expected to impact the availability of a known mineral resource. The General Order limits the wastewater discharge to a monthly flow rate up to 100,000 gallons per day; therefore, it addresses relatively small wastewater treatment systems that will consist of facilities of limited areal extent. Based on the small size of these systems, a substantial adverse effect on mineral resources is unlikely. A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; mineral resource issues will be evaluated on a site-specific basis at that time.

- b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Less than Significant Impact. See the response to item (a) above.

3.4.12 Noise

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section 3: Potential Environmental Impacts

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact. Construction activities associated with building a small domestic system will generate noise consistent with the activity. Material delivery and/or earth moving equipment typically involves diesel engines. However, the noise is generally limited to daylight hours. The duration of construction activity varies with the size of the system, from a week for a septic system to a few months for a larger system. However, larger systems are also usually located at more remote locations compared to small systems and noise will be attenuated with distance.

Small domestic systems are not typically significant noise-producing facilities. Some treatment systems, such as aerobic treatment units, have mechanical components that produce a low level of noise when operating. Treatment systems such as activated sludge (package plants) systems require pumps and blowers. If needed, pumps or blowers, can be contained within enclosures to reduce ambient noise. The largest systems may be pond treatment systems. Pond treatment systems may employ pumps and mechanical aerators which may run many hours of the day and/or night at certain times of the year. However, pond treatment systems typically occupy a large footprint so that noise is generally not a factor at or beyond the facility boundary.

Service events for small wastewater treatment systems such as septic tanks or aerobic treatment units will result in short term noise generated by a vehicle servicing the facilities, which is normally performed during daylight

hours. The frequency of servicing septic tanks is dependent on tank size and the discharge, but may be once per three years or less frequently. Aerobic treatment units typically require more frequent service and may be as frequent as four times per year. Service events for package treatment systems may occur as frequently as monthly, depending upon the wastewater system specifics. Pond systems are generally designed so that sludge removal is not needed more frequently than a 10-15 year timeframe.

A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; any potential for conflict with a local general plan or noise ordinance or other applicable noise standards will be evaluated on a site-specific basis at that time.

- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. See the response to item (a) above.

- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. See the response to item (a) above.

- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. See the response to item (a) above.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less than Significant Impact. The General Order would not add population or housing to areas. Small domestic systems may be located in the vicinity of an airport or airstrip, but they would not add substantial numbers of employees or any residents to these areas.

- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Less than Significant Impact. See the response to item (e) above.

3.4.13 *Population / Housing*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant Impact. The General Order will not alter the number of small domestic systems that would be constructed in the future; therefore, the General Order is unlikely to induce substantial population growth. Typically, construction of new or expansion of existing wastewater systems takes place as a response to accompany population growth. The General Order does not change zoning or land use designation which would be required prior to the addition of homes, businesses, roads and infrastructure. Such changes would require entitlements from local land use authorities.

- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Less than Significant Impact. Because the General Order only addresses small domestic systems, displacement of substantial number of existing housing is unlikely. A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order, the issue of displaced existing housing will be evaluated on a site-specific basis at that time.

- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Less than Significant Impact. See the response to item (b) above.

3.4.14 *Public Services*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection? Schools? Parks? Other public facilities?

Less than Significant Impact. Wastewater systems will not require additional public services such as fire protection, police protection, schools, parks, and other public facilities. New or expanding wastewater systems would not result in substantial adverse physical impacts associated with provisions of or need for new or physically altered governmental facilities. Such systems would be constructed in existing or planned and permitted communities.

3.4.15 Recreation

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less than Significant Impact. The General Order is not expected to impact the use of existing neighborhood and regional parks or other recreational facilities. The need for construction of new or expansion of wastewater systems are typically performed to address population growth, instead of causing the growth.

- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less than Significant Impact. See the response to item (a) above.

3.4.16 Transportation / Traffic

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC: Would the project:				

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ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, individually or cumulatively conflict with an applicable congestion management program, including, but not limited to level of service (LOS) standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less than Significant Impact. The implementation of the General Order is will not conflict with an applicable plan, ordinance, or policy related to transportation. Construction of new or expanding systems will have a negligible impact on traffic (mobilization of earth-moving equipment and materials to and from the sites). Long term operation of a small domestic system is not a significant trip generating activity. Adoption of the General Order is not expected to conflict with a transportation related ordinance. A project specific CEQA evaluation will be performed for new or expanding

wastewater systems seeking coverage under the General Order; the issue of traffic/transportation plan, ordinance, policies, and effectiveness of the performance of the circulation system will be evaluated on a site-specific basis at that time. The General Order itself will have less than significant impact on transportation related ordinances or policies.

- b) Conflict with an applicable congestion management program, including, but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less than Significant Impact. See the response to item (a) above.

- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Less than Significant Impact. See the response to item (a) above.

- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact. See the response to item (a) above.

- e) Result in inadequate emergency access?

Less than Significant Impact. See the response to item (a) above.

- f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less than Significant Impact. See the response to item (a) above.

3.4.17 *Utilities / Service Systems*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than Significant Impact. The General Order will be implemented by the Regional Water Boards, [establishes the minimum acceptable treatment, and sets effluent limits based on the treatment technology](#). The General Order is consistent with water quality policies [and allows Regional Water Boards to prescribe nitrogen effluent limits when needed based upon the site conditions at the discharge location](#).

Adoption of the General Order will not cause wastewater to exceed (be worse than) requirements of a Regional Water Board. A project specific CEQA

evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; compliance of individual wastewater treatment requirements will be evaluated on a site-specific basis at that time.

- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact. [Dischargers seeking coverage under the General Order may be required to make improvements in treatment, storage, or disposal capacity. Those requirements may result in new or expanded wastewater treatment systems being constructed.](#) Any new or expanded facilities are unlikely to significantly affect the environment due to the small size of the wastewater treatment systems [and requirements contained in the General Order.](#) In addition, a project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the potential for significant environmental effects will be evaluated on a site-specific basis at that time. Adoption of the General Order will not result in construction or expansion of water or wastewater treatment facilities.

- c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact. Although stormwater ponds are separate from wastewater ponds, most small domestic systems typically contain all stormwater that falls on the facility. Because the General Order requires the pond components to meet more stringent requirements, this may result in a larger wastewater pond required for some dischargers. (However, dischargers may be able to divert diluting flows, such as stormwater, from wastewater systems negating the need to expand a pond.) Adoption of the General Order is not expected to result in significant construction or expansion of stormwater drainage facilities. A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; potential environmental impacts of new or expanding stormwater drainage facilities will be evaluated on a site-specific basis at that time.

- d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less than Significant Impact. The General Order will not require new or expanded water supply entitlements. Construction of new or expanding small

domestic systems may require some water supplies to accommodate the construction processes and during startup. Supplemental irrigation water may be needed to grow a crop in an LAA. However, the General Order will not change the water supply needs or require new or expanded entitlements. Water supply use would be incidental to existing or planned and permitted uses which the wastewater treatment facility would serve. A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; water supply needs and necessity for new or expanded entitlements will be evaluated on a site-specific basis at that time.

- e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact. The General Order contains wastewater treatment and storage criteria that dischargers must comply with. In addition, the General Order includes a requirement that the dischargers evaluate the small domestic system capacity on an annual basis.

Sewage waste streams, such as septage or wasted sludge are typically disposed of at a regional (larger) wastewater system. If the larger wastewater system were unable to accommodate the small domestic system waste stream, the discharger would have to haul it to another facility.

- f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less than Significant Impact. Small domestic systems typically do not generate significant amounts of solid waste to the extent that it would become a landfill capacity issue. A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the potential for landfill capacity effects will be evaluated on a site-specific basis at that time. The General Order itself will result in less than significant impact to the capacity of landfill facilities.

- g) Comply with federal, state, and local statutes and regulations related to solid waste?

Less than Significant Impact. The General Order requires dischargers to comply with federal, state, and local statutes and regulations related to solid waste.

3.4.18 *Mandatory Findings of Significance*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact. The General Order only addresses wastewater discharges to land. Direct or indirect discharges to surface water are prohibited under the General Order. Furthermore, discharges are prohibited from polluting groundwater or surface water, adversely affecting beneficial uses of groundwater, or causing an exceedance of any applicable Basin Plan water quality objective for groundwater or surface water. As a result, surface water quality and aquatic species are unlikely to be affected. The systems are also generally limited in size which may limit any effect on habitat or terrestrial based species.

A project specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order; the potential for the factors to be degraded will be evaluated on a site-specific basis at that time.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant Impact. As described in item (a) above, this evaluation does not address a project-specific evaluation; however, based on typical small domestic systems, construction of new, or expansion of existing wastewater systems, are unlikely to result in cumulatively considerable effects on the environment. In addition, the General Order is unlikely to change the land development economics and therefore it will not change the number of wastewater treatment systems needed. It is at the discretion of each local land use authority whether to allow the construction of new or expanded facilities in a given area. Local land use authorities also have discretion over more specific siting and design requirements. Therefore, it is speculative to analyze the cumulative impacts associated with constructing new facilities in a given area.

A limited degradation of groundwater by some of the typical waste constituents released with discharge from a small domestic system after effective source control, treatment, and control is consistent with maximum benefit to the people of California. The technology, energy, and waste management advantages of a combined wastewater treatment system far exceeds the benefits derived from a community otherwise reliant on numerous individual wastewater systems, and the impact on water quality will be substantially less.

The cumulative impacts associated with siting multiple facilities in a given area can be addressed in site specific environmental analyses, which will be required for new and/or expanding facilities.

- c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact. Potential impacts to human beings from implementation of the General Order such as impacts to water quality or public health are expected to be less than significant.

Dischargers obtaining coverage under the General Order are subject to the State Water Board policies, Regional Water Board Basin Plans and policies, and local agencies siting criteria. A site specific CEQA evaluation will be performed for new or expanding wastewater systems seeking coverage under the General Order to fully assess the potential for environmental impacts that might cause adverse effects on human beings, either directly or indirectly.

PRELIMINARY STAFF DETERMINATION

- The proposed project COULD NOT have a significant effect on the environment, and, therefore no alternatives or mitigation measures are proposed.
- The proposed project MAY have a significant or potentially significant effect on the environment, and therefore alternatives and mitigation measures have been evaluated.

Note: Authority cited: Public Resources Code section 21082.
Reference: Public Resources Code sections 21080(c), 21080.5, 21083.05, 21080.1, 21080.3, 21082.1, 21083, 21083.3, 21093, 21094, 21151, *Sundstrom v. County of Mendocino*, 202 Cal.App. 3d 296 (1988); *Leonoff v. Monterey Board of Supervisors*, 222 Cal.App.3d 1337 (1990).

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The State Water Board's analysis did not indicate significant impacts on the environment were likely, or that mitigation measures were needed. In addition, no significant impacts or mitigation measures were identified in the Initial Study circulated to responsible and trustee agencies in September 2012. No potentially significant impact or mitigation measures was identified.

DETERMINATION:

On the basis of this initial evaluation:

<input checked="" type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required

Prepared by:	
Signature:	Date:
Printed Name:	

Reviewed by:	
Signature:	Date:
Printed Name:	

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