



State Water Resources Control Board

**DRAFT Initial Study
Negative Declaration**

For

Water Quality Order 2014-xxxx-DWQ

**General Waste Discharge Requirements for
Recycled Water Use**

Revised 23 April 2014

NEGATIVE DECLARATION

Pursuant to Public Resources Code Section 21080(c)

Project Title: General Waste Discharge Requirements for Recycled Water Use

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 Recycled Water Use (General Order) for the use by Regional Water Quality Control Boards (Regional Water Boards) in permitting non-potable uses of recycled municipal water as described in California Code of Regulations, title 22, section 60301 et seq. (title 22 requirements). The General Order will be available for use by Regional Water Boards to permit recycled water producers, distributors, and users statewide. The General Order will require non-potable uses of recycled water to be consistent with title 22 requirements and Regional Water Boards' Water Quality Control Plans (Basin Plans). The General Order will be an alternative to individual water reclamation requirements or master reclamation permits and will streamline permitting for uses of recycled water and to ensure consistent permitting across the state for similarly situated recycled water uses.

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 3 June 2014.

Jeanine Townsend
Clerk to the Board

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Acronyms and Abbreviations	
Basin Plan	Water Quality Control Plan
CARB	California Air Resources Board
CDF	California Department of Forestry and Fire Prevention
CEC	Contaminants of emerging concern
BOD	biochemical oxygen demand
Cal. Code Regs. or CCR	California Code of Regulations
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
e.g.	Latin <i>exempli gratia</i> (for example)
EIR	Environmental Impact Report
ESA	Endangered Species Act of 1973
General Order	General Waste Discharge Requirements
GHG	Greenhouse Gas
LOS	level-of-service
MAFY	million acre feet per year
MOA	Memorandum of Understanding
MPN	most probable number
NCCP	Natural Community Conservation Plan
NPDES	National Pollutant Discharge Elimination System
OPR	Office of Planning and Research
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
Regional Water Board	Regional Water Quality Control Board
§	section
State Water Board	State Water Resources Control Board
TDS	Total Dissolved Solids
Title 22 requirements	Water Recycling Criteria, Cal. Code Regs. tit. 22, §60301 et seq.
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WDR	Waste Discharge Requirements
WRR	Water Recycling Criteria
WWTP	Wastewater treatment plant
WQO	Water Quality Order

1 Introduction

1.1 Overview and Regulatory Guidance

The State Water Resources Control Board (State Water Board) is preparing General Waste Discharge Requirements for Recycled Water Use (General Order). The General Order will be available to the Regional Water Quality Control Boards (Regional Water Boards) for permitting non-potable uses of recycled municipal wastewater. The General Order will be used to permit recycled water producers, distributors, and users statewide. The General Order will allow non-potable uses of recycled municipal wastewater consistent with the Regional Water Boards' Water Quality Control Plans (Basin Plans). The General Order will be an alternative to individual water reclamation requirements or master reclamation permits and will streamline permitting. This Initial Study was prepared to address environmental factors related to uses of recycled water.

Recycled water is water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource (Wat. Code, § 13050, subd. (n)). Allowable uses of recycled water and reuse criteria are described in California Code of Regulations, title 22, section 60301 et seq. (title 22 requirements).

Waste discharge in the state is regulated by the Regional Water Boards which issue Waste Discharge Requirements (WDRs). WDRs require the discharge to conform to the Water Code, Basin Plans, and applicable policies of the State Water Board and Regional Water Boards. The California Department of Health (CDPH) reviews title 22 Engineering Reports for recycled water projects and makes recommendations to the Regional Water Boards in preparation of WDRs.

This California Environmental Quality Act (CEQA) document addresses the discretionary action of adopting a General Order and the resulting potential for reasonably foreseeable impacts on the environment that recycled water use may have. The Regional Water Boards have discretion whether to use the General Order or individual water reclamation requirements or master reclamation permits. Furthermore, local land use agencies and Regional Water Boards have discretion over approval, siting, and design of new or expanding treatment or conveyance facilities.

Recycled water use is expected to increase in the future; however, the State Water Board cannot forecast the ultimate number of producers, distributors, and/or users. The existence of an administrative device such as the General Order will not change the number of facilities producing recycled water, only how the Regional Water Boards may permit them. 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 impacts associated with uses of recycled water.

This Initial Study was prepared based upon consideration of existing recycled water use

areas. The State Water Board cannot evaluate site-specific environmental factors at this time because the General Order does not address future recycled water uses at specific facilities. Any new or expanding recycled water production or distribution facilities 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 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 uses of recycled water and to ensure consistent permitting across the state for similarly situated recycled water uses.

The document is organized as follows:

- Section 1, "Introduction," describes the purpose and organization of this document.
- Section 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.
- Section 3, "Recycled Water Rules and Regulation," provides applicable state policies, statutes, and regulations pertaining to the production and use of recycled water in California.
- Section 4, "Potential Environmental Impacts," evaluates a range of potential environmental impacts using environmental factors provided in the state CEQA Guidelines' Environmental Checklist (Appendix G of the state CEQA Guidelines).

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 David Balgobin at (916) 341-6914 or David.Balgobin@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 wastewater treatment 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) and Safe Drinking Water Act of 1974, along with 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 (see 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 wastewater treatment 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 Basin Plans and take into consideration the beneficial uses to be protected and nuisance to be prevented. Water Code section 13263, subdivision (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 the report of discharge and issuance of waste discharge requirements or a waiver pursuant to Water Code section 13269.

Recycled water rules and regulations relevant to the allowed uses of recycled water in California are discussed in section 3 of this document.

2.2 Project Description

The State Water Board is preparing a General Order for the use by Regional Water Boards in permitting uses of recycled water. The General Order will be available for use by Regional Water Boards to permit recycled water producers, distributors, and users statewide. The General Order will require uses of recycled water to be consistent with the California Code of Regulations, title 22 and the Regional Water Boards Basin Plans. The General Order will be an alternative to individual water reclamation requirements or master reclamation permits and will streamline permitting for uses of recycled water.

Compliance with the General Order will be documented by monitoring reports submitted to the Regional Water Board. This includes regularly reporting the results of observations and analytical data related to compliance. Recycled water producers are responsible for collecting reports from its recycled water users. Recycled water producers, distributors, and users are responsible to compile and file necessary compliance reports as required by the Regional Water Board.

The concerns associated with recycled water are: (1) Salinity; (2) nitrogen (nitrate); (3) exposure to wastewater pathogens; (4) Disinfection byproducts; and (5) constituents of emerging concern. The following subsections identify the issues associated with various water quality standards and specific constituents in recycled water.

2.2.1 Salinity

Salinity is a measure of total dissolved solids (TDS) in water. Excessive salinity can reduce the beneficial uses of water. Salinity can be affected by the use of recycled water with elevated concentrations of TDS.

It is anticipated that in many cases, recycled water will consist of a portion of the total applied irrigation water. Other sources of irrigation water are likely to be potable water, imported water, agricultural water supply wells, irrigation districts (surface water supplies), and precipitation. Blending sources of irrigation water will generally reduce concentrations of, and/or loading rates of salinity constituents. As a result, salinity increases are unlikely to impair an existing and/or potential beneficial use of groundwater.

2.2.2 Nitrogen (nitrate)

Nitrogen is a nutrient present in recycled water that may be at a concentration that can degrade groundwater quality. This General Order limits the application of nitrogen to agronomic rates. When applied to cropped (or landscaped) land, some of the nitrogen in recycled water will be taken up by the plants, lost to the atmosphere through volatilization of ammonia or denitrification or stored in the soil matrix. As a result, nitrogen increases are unlikely to impair an existing and/or potential beneficial use of groundwater.

2.2.3 *Pathogens*

Pathogens and other microorganisms may be present in recycled water based on the extent of disinfection. Coliform bacteria are used as a surrogate (indicator) because they are present in untreated wastewater, survive in the environment similar to pathogenic bacteria, and are easy to detect and quantify. Pathogens are generally limited in their mobility when applied to land.

Setbacks from recycled water use areas are required in title 22 as a means of reducing pathogenic risks by coupling pathogen inactivation rates with groundwater travel time to a well or other potential exposure route (e.g. water contact activities). In general, a substantial unsaturated zone reduces pathogen survival compared to saturated soil conditions. Fine grained soil particles (silt or clay) reduce the rate of groundwater transport and therefore are generally less likely to transport pathogens. Setbacks also provide attenuation of other recycled water constituents through physical, chemical, and biological processes.

When needed, disinfection can be performed in a number of ways. Title 22 contains water recycling criteria, which lists disinfection requirements for specifically listed activities.

2.2.4 *Disinfection Byproducts*

Disinfection by-products consist of organic and inorganic substances produced by the interaction of chemical disinfectants with naturally occurring substances in the water source. A summary of common disinfection by-products include trihalomethanes, haloacetic acids, bromate, and chlorite. There are several treatment technologies available to remove disinfection by-products. The most common method to remove low concentrations of these constituents is granulated active carbon adsorption, which involves passes the disinfected water through a vessel that contains the granulated active carbon.

2.2.5 *Constituents of Emerging Concern*

Constituents of Emerging Concern (CECs) in recycled water are particularly a public health concern where recycled water use areas are near a drinking water source. CECs are any unregulated constituents that could have toxicological effects, such as pesticides, chemicals in personal care products, nanoparticles, disinfection biproducts, pharmaceuticals, and plasticizers.

The 2013 amendment to the Recycled Water Policy establishes monitoring requirements for CECs in recycled water for groundwater recharge use. The monitoring requirements include monitoring of health-based and performance indicator CECs and surrogates.

Because of its specific public health concerns pertaining to potable recycled water use. CECs monitoring are currently not monitored in non-potable uses.

2.2.6 *Unauthorized Discharges of Recycled Water*

Uses of recycled water are intended to remain on their designated area to avoid public health and nuisance problems that could result from runoff. Water leaving reuse area as part of the facility design, excessive application, intentionally overflowed or applied, or due to operation negligence is considered unauthorized discharges.

During major storm events, runoff from areas irrigated with recycled water or from recycled water impoundments may be difficult to contain. In some cases, various chemicals (e.g., copper sulfate, acrolein, etc.) may have been added to impoundments for weed, algae, and vector control. Runoff from recycled water use areas may contain higher concentrations of salts and other chemicals including pesticides and fertilizers.

Existing Regional Water Board practices related to the regulation of incidental runoff include items listed below:

- Where reclamation requirements prohibit the discharge of waste to waters of the State and discharges are not expected to occur, occasional runoff should not trigger the need for either an individual NPDES permit or enforcement action.
- If discharges from recycled water use area occur routinely, such discharges may be regulated under a municipal stormwater NPDES permit.

The General Order prohibits the direct or indirect discharge from recycled water use areas to either perennial or ephemeral surface waters, unless otherwise authorized by a permit issued pursuant to the federal Clean Water Act. In most cases, the implementation of Best Management Practices (BMPs) should minimize or eliminate the conditions that cause runoff, ponding, and windblown spray.

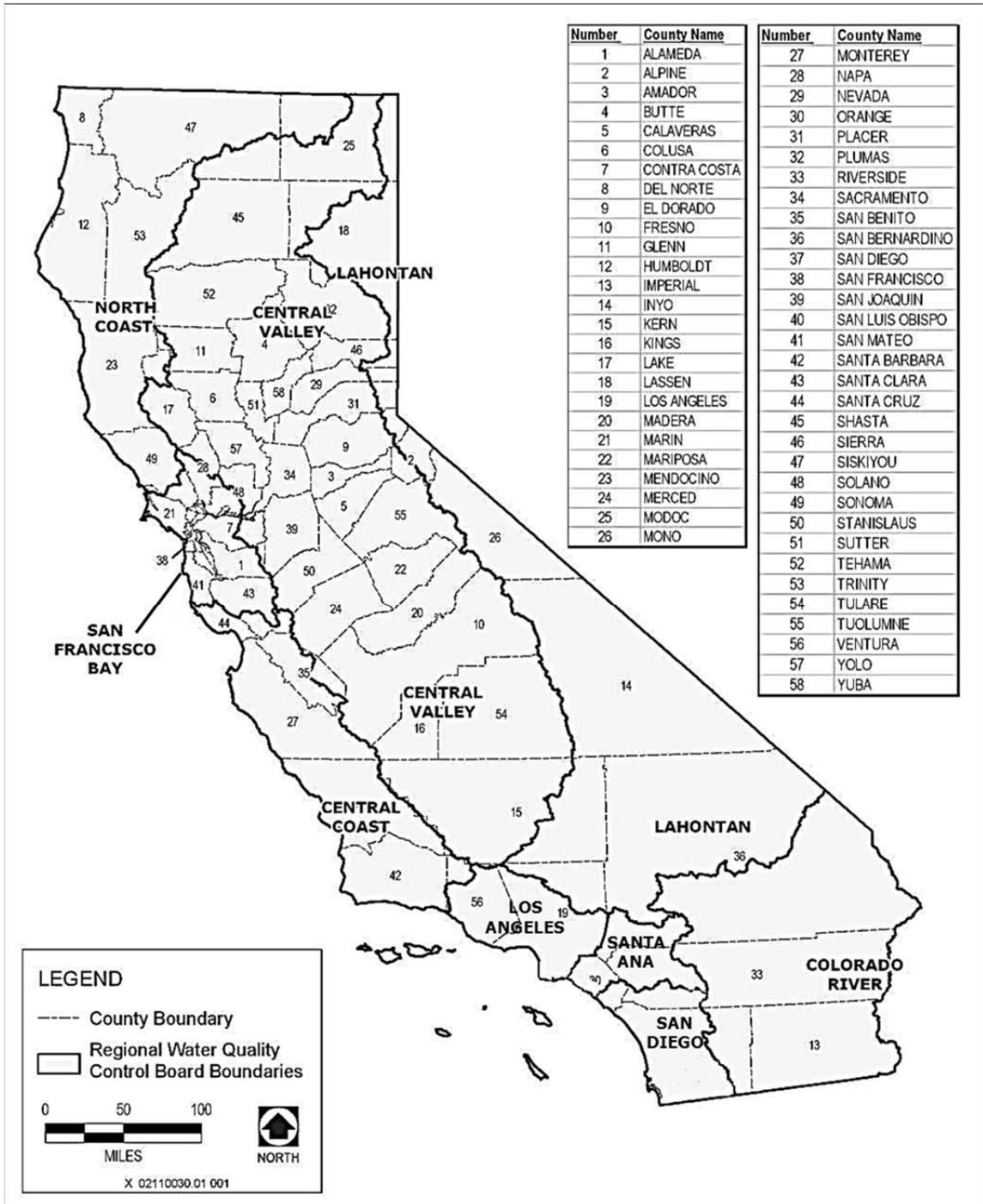


Figure 1 Regional Water Quality Control Boards and County Boundaries

3 Recycled Water Policies and Regulations

The Recycled Water Policy was adopted in 2009 and was amended in 2013. The Policy sets the goal to increase the use of recycled water over 2002 levels by at least 1 million acre feet per year (MAFY) by 2020 and by at least 2 MAFY by 2030. It is the Recycled Water Policy's goal to promote the use of recycled water to the maximum extent in order to supplement existing surface and ground water supplies to help meet water needs. One of the primary conditions on the use of recycled water is protection of public health.

State regulations pertaining to the production and use of recycled water in California are found in the Water Code, Health and Safety Code, and the California Code of Regulations (CCR). Basin Plans may also contain the recycled water use policy of individual Regional Water Boards. Several related additional agency and judicial decisions pertaining to recycled water also exist. Recycled water regulations generally have two elements: water quality standards and public health protection standards.

3.1 Regional Water Board Water Recycling Requirements

All persons who recycle or propose to recycle water, and who use or propose to use recycled water, must file a report with the appropriate Regional Water Board. If a Regional Water Board determines that it is necessary to protect public health, safety, or welfare, it may prescribe individual water recycling requirements (WRRs) where recycled water is used or proposed to be used.

Regional Water Board requirements for recycled water use often prescribe discharge prohibitions, effluent limitations, and provisions for recycled water waste constituents and use activities. In some cases, especially for municipal wastewater discharges via an ocean outfall, the National Pollutant Discharge Elimination System (NPDES) permit for a Producer's facility does not include requirements necessary to ensure the protection of beneficial uses of groundwater resources (e.g., agricultural supply, municipal supply). In order to facilitate the use of recycled water, Regional Water Boards adopt master reclamation permits that implement the title 22 requirements and consider potential impacts to the beneficial uses of groundwater.

3.2 Water Recycling Criteria (Title 22 Requirements)

Pursuant to Water Code section 13521, the CDPH has established uniform statewide recycling criteria for each varying type of use of recycled water where the use involves the protection of public health. The water recycling criteria is codified in Cal. Code Regs. tit. 22, section 60301 et seq. and will be referenced in this document as title 22 requirements. Title 22 requirements are designed to protect public health from pathogens. Other water quality standards inherent in the use of recycled water are not regulated by title 22 requirements. Examples of factors that affect water quality not regulated by title 22 requirements include nutrients, salinity constituents, boron, chloride, metals, pesticides, and others.

In general, the title 22 requirements establish a regulatory system that creates the following classifications of recycled water quality with respect to public health:

- *Undisinfected secondary recycled water* (Cal. Code Regs., tit. 22, § 60301.900): The lowest public health protection recognized by the title 22 requirements, undisinfected recycled water is typically used for the agricultural irrigation of fodder and fiber type crops
- *Disinfected secondary-23 recycled water* (Cal. Code Regs., tit. 22, § 60301.220): Recycled water that has been disinfected such that the median concentration of total coliform bacteria does not exceed a most probable number (MPN) of 23 per 100 milliliters of sample. Disinfected secondary-23 recycled water is typically used for some types of surface irrigation, including some landscape irrigation practices, where public access is controlled or restricted. Disinfected secondary-23 recycled water is also sometimes used for commercial or industrial applications such as boiler feed water, cooling water, and concrete mixing.
- *Disinfected secondary-2.2 recycled water* (Cal. Code Regs., tit. 22, § 60301.225): Recycled water that has been disinfected such that the median concentration of total coliform bacteria does not exceed a MPN of 2.2 per 100 milliliters of sample. Disinfected secondary-2.2 recycled water is typically used for some types of surface irrigation, including some landscape irrigation practices, and landscape water features where public access is controlled or restricted.
- *Disinfected tertiary recycled water* (Cal. Code Regs., tit. 22, § 60301.230): Recycled water that is filtered and subsequently disinfected by either chlorine disinfection or other filtration process that has been demonstrated to remove or inactivate of 99.999% of polio virus or MS2 bacterial virus present in the wastewater.

CDPH is developing regulations that define “advanced treatment criteria” for recycled water. Full advanced treatment of recycled water is the treatment of oxidized wastewater (Cal. Code Regs., tit. 22, § 60301.650) using a reverse osmosis and oxidation treatment process meeting the requirements of the draft regulations. CDPH is currently in the process of developing the remainder of the regulation package.

3.3 Division of Responsibility between the Regional Water Boards and the California Department of Public Health

Regional Water Boards must consult with and consider recommendations of CDPH when issuing water recycling requirements (Wat. Code, § 13523.). CDPH is statutorily required to establish uniform statewide recycling criteria for the various uses of recycled water to assure protection of public health where recycled water use is involved. CDPH has promulgated regulatory criteria that include specified approved uses of recycled water, numerical limitations and requirements, treatment method requirements and performance standards. CDPH regulations allow use of alternate methods of treatment in some cases, so long as the alternate methods are determined by CDPH to provide

equivalent treatment and reliability. A 1996 Memorandum of Agreement (MOA) between CDPH (formerly known as the Department of Health Services), State Water Board, and the Regional Water Boards on the use of recycled water allocates primary areas of responsibility and authority between these agencies. The MOA provides methods and mechanisms necessary to ensure ongoing and continuous future coordination of activities relative to the use of recycled water in California.

3.4 Antidegradation Policy

The Implementation Plans of the various Water Quality Control Plans establish procedures for the implementation of the antidegradation directives of the State Water Board. In general, the prevention of degradation of high quality groundwater and surface waters is a high priority of the California Water Boards.

In 1968, the State Water Board adopted Resolution No. 68-16 which specifies requirements to maintain high quality waters of the State. Degradation in water quality can only be authorized if it is demonstrated that the change is consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in water quality policies (i.e., the change results in exceedance of water quality objectives). Any activity that results in the degradation of the quality of waters of the state must be required to employ best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and the highest quality of water will be maintained consistent with maximum benefit to the people of the State. Resolution No. 68-16 pursuant to the respective antidegradation implementation plans of the various Basin Plans are collectively known as the "Antidegradation Policy."

Degradation of groundwater by residual constituents in recycled water after effective source control, treatment, and control is determined to be consistent with the maximum benefit to the people of California. This determination is based on considerations of reasonableness under the circumstances of the recycled water use. Factors that are considered include:

- Past, present, and probable beneficial uses of the receiving water (as specified in the applicable Water Quality Control Plan);
- Economic and social costs, tangible and intangible, of the recycled water usage compared to the benefits;
- Environmental aspects of the recycled water usage; and
- Implementation of feasible alternative treatment or control methods.

The proposed General Order establishes terms and conditions of discharge to ensure that the discharge does not unreasonably affect present and anticipated beneficial uses of groundwater and surface water for the following reasons:

- Recycled water will be applied at agronomic rates reflecting the seasonal hydraulic and nutrient requirements of the use areas;

- The Producer is responsible for ensuring that recycled water meets the quality standards of the General Order and associated waste discharge requirement order(s) for the WWTP(s)

The technology, energy, water recycling, and waste management advantages of municipal wastewater treatment and water recycling exceed any benefits derived from a community otherwise reliant on numerous concentrated individual wastewater systems that do not recycle their wastewater, and the impact on water quality will be substantially less.

Economic prosperity of State communities and associated industry is of maximum benefit to the people of the State, and therefore sufficient reason to allow some groundwater degradation provided terms of the applicable Water Quality Control Plan are met.

4 Potential Environmental Impacts

4.1 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).

4.1.1 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 Region¹⁰.

¹⁰ Hydrologic regions are discussed in section 4.3 of this Initial Study.



4.1.2 *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.

4.1.3 *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.

4.1.4 *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.

4.1.5 *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.

4.1.6 *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.

4.1.7 *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.

4.1.8 *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.

4.1.9 *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.

4.1.10 *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.

4.2 *Hydrology*¹¹ *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.

4.2.1 *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

¹¹ 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.

4.2.2 *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.

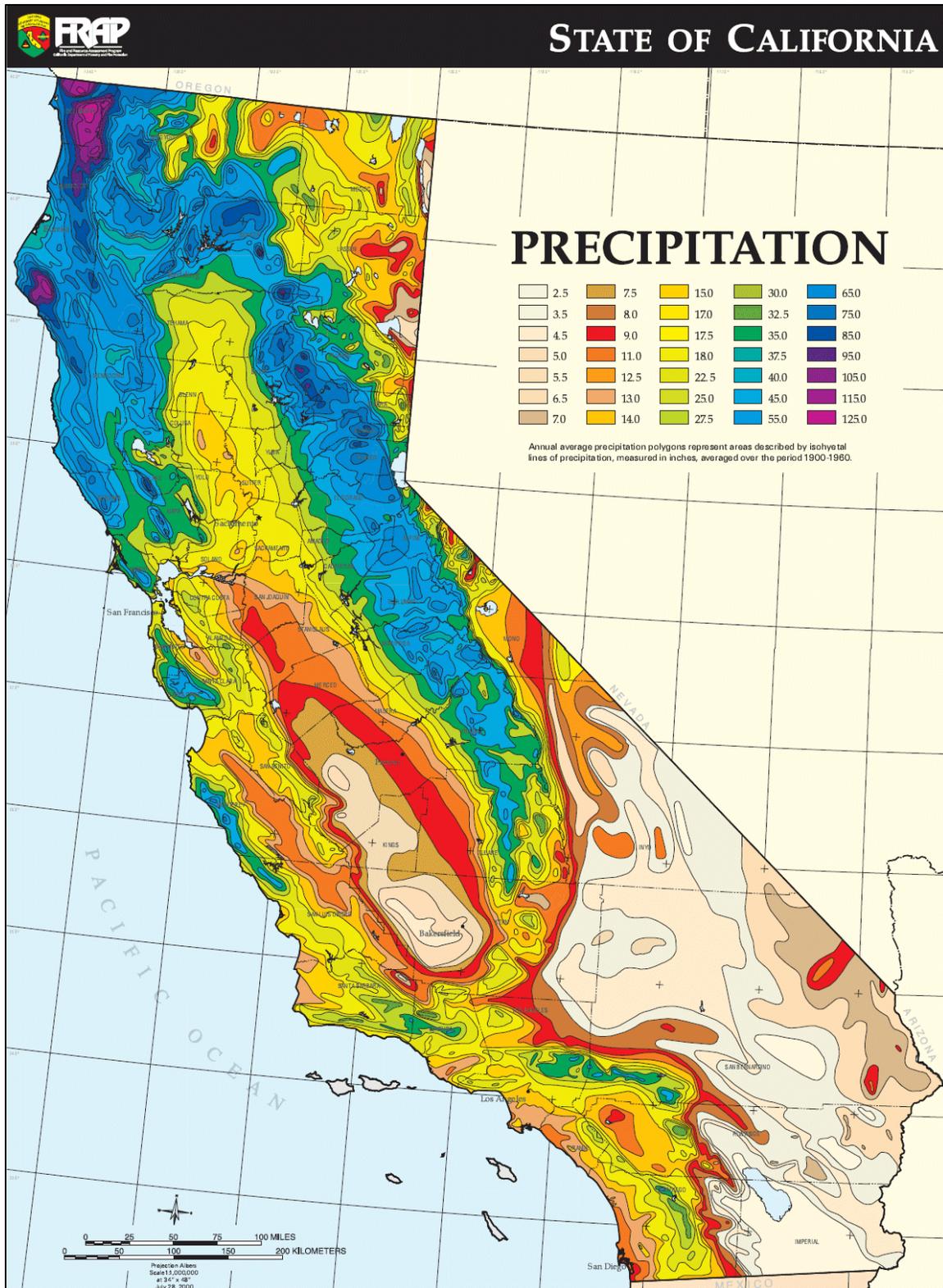


Figure 3 Annual Precipitation Rates in California (California Department of Forestry and Fire Prevention, 2011)

4.2.3 *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.

4.3 *Hydrologic Regions of California*¹²

Hydrologists divide California into hydrologic regions (Figure 4). The Regional Water Boards are defined (for the most part¹³) 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.

¹² Hydrologic region descriptions were adapted from: California's Groundwater, Bulletin 118, DWR 2003 and the Regional Board Water Board Basin Plans.

¹³ 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.

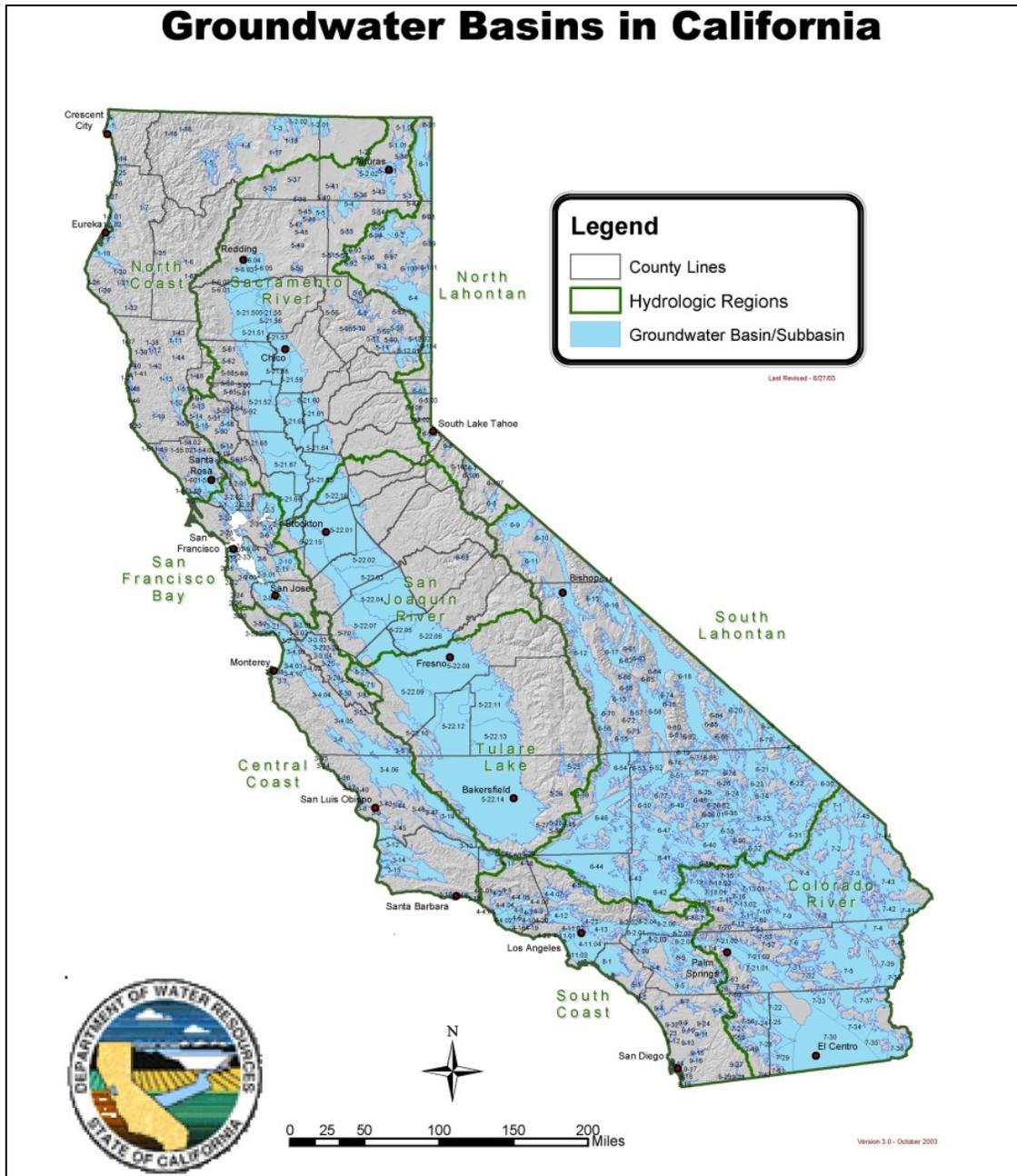


Figure 4 Hydrologic Regions and Groundwater in California (DWR, 2003)

4.3.1 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.

4.3.2 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.

4.3.3 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.

4.3.4 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 comprised of fractured hard rock zones.

4.3.5 *Central Valley Hydrologic Region*

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

4.3.6 *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.

4.3.7 *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.

4.3.8 *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 consists of fractured hard rock zones.

4.3.9 *Lahontan Hydrologic Region*

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

4.3.10 *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.

4.3.11 *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.

4.3.12 *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.

4.4 *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 uses of recycled water. Foreseeable environmental impacts resulting from other activity, such as construction of new facilities that treat or convey recycled water, is not within the scope of the General Order, and therefore, is not evaluated.

Use of recycled water 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 activities that are beyond use of recycled water.

Wastewater treatment and conveyance 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 Recycled Water Use
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:	David Balgobin Waste Discharge Requirements Program, State Water Resources Control Board (916) 341-6914
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 section 2.2 - 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

4.4.1 *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. The use of recycled water may occur in a variety of settings in many areas of California, including scenic areas. However, the use of recycled water will not have a substantial adverse effect on a scenic vista. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water. At some locations, minor alterations to the land surface may be constructed to direct runoff as needed. In most cases the alterations will not be noticeable to casual observers. title 22 requirements requires public notification of the use of recycled water, so signs will be required in the use areas. However, the signs are small (approximately four inches by eight inches), so they will have minimal impact to scenic vista.

Siting criteria of the local authority will continue to establish appropriate controls 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 will 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. Recycled water could be used to irrigate highway landscape requiring

notification signs as described above. Because the use of recycled water is a low-profile activity and would be located outside of highway rights-of-way, impacts to scenic highways would be less than significant.

- 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. New permanent sources of external lighting are not required features under the General Order. 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.

4.4.2 Agriculture Resources

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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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:

- 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?

Section 4: Potential Environmental Impacts

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<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. Application of recycled water 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. Use of recycled water would not result in conversion of farmland to other uses.

The General Order does not change zoning or land use designation, and will not alter the economics of farmland conversion to other uses. 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?

No 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. New or existing recycled water use could occur within land zoned for agriculture and land with existing Williamson Act Contracts; however, the General Order does not affect zoning or Williamson Act contracts.

- 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))?

No 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. Adopting and implementation of the General Order does not change zoning or land use designation, and will not alter the economics of forest land conversion to other uses. New or existing recycled water use could occur within forest land, as long as it is consistent with title 22 requirements. 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.

4.4.3 Air Quality

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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. The potential for conflict or violation of an air quality plan as a result of adoption of the General Order is very low. Aside from the title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water. Recycled water uses are unlikely to conflict with implementation of the applicable air quality plan. 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.

- 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. Recycled water meeting title 22 requirements generally do not produce objectionable odors because it has been treated to reduce biochemical oxidation demand. In rare circumstances, recycled water may be stored in conveyance devices (pipeline, ditch, etc) and odors may be generated. However, the General Order will contain specification prohibiting generation of objectionable odors. The recycled water producers are required to have contingency plans including standby unit processes, alarms, emergency storage, and subsequent treatment for off-specification wastewater. The General Order will have a less-than-significant impact in creating objectionable odors affecting a substantial number or people.

4.4.4 *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 type="checkbox"/>	<input checked="" 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 use of recycled water in accordance with the General Order is not expected to 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.

Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water. No additional runoff or saturation should result from application of recycled water. There may be indirect environmental impacts from the use of recycled water on sensitive natural communities and wetlands hydrologically connected to groundwater that may be affected by salts and chlorine in recycled water. The General Order prohibits direct or indirect discharge to surface waters, including wetlands. Due to the great number of special status species throughout the state, impacts from especially large use of recycled water should be evaluated on a case-by-case basis.

- 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. The General Order only authorizes use of recycled water for discharges limited to land and its application is 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?

No Impact. 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.

4.4.5 *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 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 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 section 15064.5?

Less-than-Significant Impact. Adoption and implementation of the General Order will not have a substantial adverse effect on any historical resources. Use of recycled water would not result in any change in the significance of a historical resource as defined in section 15064.5. Aside from title 22

requirements, there is unlikely to be any difference in the application method between potable water and recycled water.

- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 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 and implementation of the General Order is not expected to have a substantial adverse effect on any human remains. See the response to item (a) above. 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 should reduce potential impacts to less-than-significant levels.

4.4.6 *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"/>

Section 4: Potential Environmental Impacts

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>
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 and implementation of the General Order will not expose people to substantial adverse effects caused by geologic or soil conditions. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water. 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. See the response to item (a)(i) above.

- 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 and implementation of the General Order will not have a substantial adverse effect caused by expansive soils creating substantial risks to life or property. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water. Application of recycled water may take place on expansive soils, but it is unlikely to create substantial risks to life and property.

- 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. Adoption and implementation of the General Order is not evaluated at a specific location; however, it is unlikely to induce new development requiring wastewater service. Aside from measures taken to minimize human exposure to pathogens, there is unlikely to be any difference in the application method between potable water and recycled water. Wastewater disposal capacity required for recycled water discharges to a land application area or a wastewater treatment facility will likely be similar. The General Order will have less-than-significant-impact to availability of wastewater service demand.

4.4.7 Greenhouse Gas Emissions

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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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 type="checkbox"/>	<input checked="" 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. The adoption and implementation of the General Order is not expected to generate greenhouse gas emissions, either directly or indirectly. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water.

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

Less-than-Significant Impact. 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 greenhouse gas (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.

Senate Bill (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 ABI 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 S-3-05 was signed by Governor Schwarzenegger; this executive order stated 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 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.

The adoption and implementation of the General Order would not affect applicable air quality plans. Any impacts will be less-than-significant.

4.4.8 *Hazard & Hazardous Materials*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant 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"/>

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ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>
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 and implementation 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.

Recycled water delivered for application at use areas should have already met title 22 requirements. In cases where the delivered recycled water is further disinfected using chlorine gas or sodium hypochlorite to meet other uses, such practices must be evaluated at a case-by-case basis and may require a project specific CEQA evaluation. Hazardous materials are defined and regulated under several federal and state statutes and associated regulations. The General Order does not change compliance with 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. New or existing recycled water use could occur within an airport land use plan or within two miles of a public airport or public use airport, as long as the application is consistent with title 22 requirements. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water. The potential impacts of the General Order in a safety hazard for people residing or working near recycled water use area are considered less-than-significant.

- 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. See the response to (e) above.

4.4.9 *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 storm water 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 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"/>
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 and implementation of the General Order is not expected to violate water quality standards or waste discharge requirements. The General Order will be implemented by the Regional Water Boards and compliance with the Basin Plan is required.

The recycled water producer is required to produce recycled water that is compliant with title 22 requirements. If the proposed discharge is not protective of water quality, or does not comply with Basin Plan requirements or title 22 requirements. The Regional Water Board can require additional treatment of the wastewater before allowing the discharge under site-specific WDRs.

- 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. The General Order only permits recycled water uses allowed by title 22 requirements and does not include groundwater recharge use.

Recycled water use may take place in communities relying on groundwater as source water. Recycled water may be used to replace groundwater that may otherwise have been used for to meet such demands. The proposed General Order may assist in reducing the depletion of groundwater supplies and facilitating groundwater recharge by reduced groundwater pumping for potable use, such that a net deficit in aquifer volume can be prevented.

- 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. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water uses and is unlikely to alter the existing drainage pattern of the site or area. The General Order prohibits discharge to surface water bodies, therefore it is unlikely for the recycled water use to result in the alteration of the course of a stream or river.

- 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 storm water drainage systems or provide substantial additional sources of polluted runoff?

Less-than-Significant Impact. Aside from title 22 requirements, there is unlikely any difference in the application method between potable water and recycled water uses. Uses of recycled water allowed by the General Order will most likely offset uses of potable sources and are not expected to create or contribute excessive runoff water that would create or contribute excess runoff water which would exceed the capacity of existing or planned storm water drainage systems. The General Order allows only uses of recycled water compliant with title 22 requirements; therefore, 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 Regional Water Board's Basin Plan, not pollute ground 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 or Flood Insurance Rate Map or other flood hazard delineation map?

Less-than-Significant Impact. The General Order does not address 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, 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 adoption and implementation of the General Order is not expected to place within a 100-year flood hazard area structures which would impede or redirect flood flows. Recycled water uses covered under the General Order may take place within 100-year flood hazard areas; however, they would typically not include large above-ground structures which would impede or redirect flood flows.

- 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. See the response to item (g) above.

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

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

4.4.10 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 adoption and implementation of the General Order is not expected to physically divide an established community. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water uses that physically divide an established community and would result in less-than-significant impact.

- 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 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.

4.4.11 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"/>
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. The adoption and implementation of the General Order is not expected to impact the availability of a known mineral resource. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water uses that will result in the loss of availability of a known mineral resource.

- 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.

4.4.12 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"/>
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. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water uses. Noises produced by uses of recycled water authorized under title 22 requirements (irrigation, toilet flushing, street cleaning, etc) are not expected to be more than noises generated by potable water use. The adoption and implementation of the General Order is not expected to result in generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

- 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. Recycled water application 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.

4.4.13 *Population / Housing*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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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"/> |

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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. Recycled water is water resource that may be available for a community. Recycled water use authorized through the General Order will likely be used to supplement or replaced existing water uses authorized by title 22 requirements. The General Order will only provide a streamlined method to permit its use, and is not expected to substantially induce population growth in area, either directly or indirectly. The General Order will have a less-than-significant impact to population growth.

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

Less-than-Significant Impact. The adoption and implementation of the General Order is unlikely to displace substantial numbers of existing housing. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water uses. For example, signs indicating recycled water use areas or small appurtenances (such as backflow device) installed to meet title 22 requirements have a minimal footprint.

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

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

4.4.14 *Public Services*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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Section 4: Potential Environmental Impacts

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. The adoption and implementation of the General Order is not expected to result in substantial adverse impact or need for new or physically altered governmental facilities. Such systems would be constructed in existing or planned and permitted communities. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water uses.

4.4.15 *Recreation*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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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. Adoption and implementation of the General Order is not expected to increase the use of existing neighborhood and regional parks or other recreational facilities that may accelerate substantial physical deterioration of the facilities.

Recycled water meeting title 22 requirements may be used for landscape irrigation of parks or decorative fountains, which may sustain or improve conditions of park or recreation facilities. The General Order will have a less-than-significant impact to existing neighborhood and regional parks or other recreational facilities.

- 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.

4.4.16 *Transportation / Traffic*

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

Section 4: Potential Environmental Impacts

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 adoption and implementation of the General Order is unlikely to conflict with an applicable plan, ordinance, or policy related to transportation. 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.

4.4.17 *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 storm water 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"/>

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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. Regional Water Boards may establish the minimum acceptable treatment, and set effluent limits. Implementation of the General Order will be consistent with water quality policies and allows Regional Water Boards to prescribe additional monitoring requirements when needed based upon the site conditions at the discharge location. Regional Water Boards have the choice to issue individual WDRs for proposed applications where additional treatment may be required. A site-specific project CEQA evaluation will be performed for such applications.

- 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. The General Order is intended for permitting uses of recycled water consistent with title 22 requirements. The General Order may facilitate an increased use of recycled water and result in construction of new water or wastewater treatment facilities or expansion of existing facilities. In such situations, a project specific CEQA evaluation will be performed for new or expanding wastewater systems, and the potential for significant environmental effects will be evaluated on a site-specific basis at that time.

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

Less-than-Significant Impact. Storm water is generally not mixed with recycled water because of the mixture would result in additional restrictions for storm water. The General Order is unlikely to result in impacts to storm drainage facilities.

- 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 adoption or implementation of the General Order is not expected to require new or expanded water supply entitlements. Water supply use would be incidental to existing or planned and permitted uses which the wastewater treatment facility would serve. Aside from title 22 requirements, there is unlikely to be any difference in the application method between potable water and recycled water uses and is unlikely to require additional water supply.

- 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 adoption and implementation of the General Order is intended for permitting uses of recycled water compliant with title 22 requirements to supplement or in place of potable water. Aside from title 22 requirements, the use is unlikely to be any difference in the application method between potable water and recycled water uses and is unlikely to create additional wastewater treatment demand.

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

Less-than-Significant Impact. The adoption and implementation of the General Order is unlikely to generate significant amounts of solid waste to the extent that it would become a landfill capacity issue; however, should any solid waste is generated, a project specific CEQA evaluation will be performed and 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 adoption and implementation of the General Order is unlikely will generate solid waste; however, should any solid waste is generated, the dischargers are required to comply with federal, state, and local statutes and regulations related to solid waste.

4.4.18 *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 statewide uses of recycled water allowed under title 22 requirements. Other activities, such as construction of wastewater treatment or recycled water distribution facilities are not covered under this General Order.

Direct or indirect discharges to surface water are prohibited under the General Order and are prohibited from polluting ground or surface water, adversely affecting beneficial uses of groundwater, or causing an exceedance of any applicable Basin Plan water quality objective for ground or surface water. As a result, surface water quality and aquatic species are unlikely to be affected.

Furthermore, land application of recycled water is applied agronomically to minimize impacts on habitat or terrestrial based species.

- 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 only addresses uses of recycled water allowed under title 22 requirements. Other activities, such as construction of wastewater treatment or recycled water distribution facilities are not covered under this General Order. Uses of recycled water meeting title 22 requirements are unlikely to result in cumulatively considerable effects on the environment.

Limited degradation of groundwater by some of the typical waste constituents released with discharge from a domestic wastewater treatment 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 system far exceeds any benefits derived from a community otherwise reliant on numerous individual wastewater systems, and the impact on water quality will be substantially less.

- 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.

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. No potentially significant impact 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:	

5 References

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