# CALIFORNIA ENVIRONMENTAL QUALITY ACT DRAFT INITIAL STUDY/CHECKLIST

### And

### **NEGATIVE DECLARATION**

Project Title: General Waste Discharge Requirements for Limited Domestic

Wastewater Treatment Systems

**Applicant:** Lahontan Regional Water Quality Control Board

2501 Lake Tahoe Blvd. South Lake Tahoe CA 96150

Project Description: The Lahontan Regional Water Quality Control Board (Lahontan Water Board) is preparing General Waste Discharge Requirements for Limited Domestic Wastewater Treatment Systems (Limited Domestic Order) that will be applicable to the Lahontan Region. The most similar, extant general permit, State Water Resources Control Board Order WQ 2014-0153-DWQ General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (Small Domestic Systems Order), regulates the discharges from small domestic wastewater treatment and disposal systems (monthly average flow rate of 100,000 or less gallons per day). The Small Domestic Systems Order does not establish nitrogen effluent limit concentrations for small domestic wastewater treatment systems that are designed to discharge less than or equal to 20,000 gallons per day.

The proposed permit for the Lahontan Region would provide regulation for limited domestic wastewater treatment systems with discharges with a monthly average flow rate of 100,000 or less and greater than 250 gallons per day.

Wastewater treatments system types could include septic tanks, activated sludge treatment, pond facilities, and filtering and waste removal. The minimum level of treatment will be determined by requirements of the Limited Domestic Order. The Limited Domestic Order will be an alternative to individual waste discharge requirements issued by the Lahontan Water Board to streamline permitting of limited domestic wastewater treatment systems that meet the specified eligibility criteria and limit degradation of groundwater resources.

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	Acronyms and Abbreviations			
AB	Assembly Bill			
Basin Plan	Water Quality Control Plan			
BOD	Biochemical oxygen demand			
CARB	California Air Resources Control Board			
CDPH	California Department of Public Health			
CDFW	California Department of Fish and Wildlife			
CEQA	California Environmental Quality Act			
CH4	Methane			
Clean Water Act	federal Water Pollution Control Act of 1972			
CO2	Carbon dioxide			
CWC	California Water Code			
DWR	Department of Water Resources			
EIR	Environmental Impact Report			
ESA	Environmental Species Act			
Limited Domestic Order	General Waste Discharge Requirements for Limited			
	Domestic Wastewater Treatment Systems			
gpd	gallons per day			
GHG	Greenhouse gas			
H2S	Hydrogen sulfide			
Lahontan Water Board	Lahontan Regional Water Quality Control Board			
Limited Domestic Systems	Limited domestic wastewater treatment systems			
	(monthly average flow rate of 100,000 or less gallons per			
	day)			
LAMP	Local Area Management Plan			
LLA	Land application area			
MBR	Membrane biological reactor (membrane bioreactor)			
OPR	Office of Planning and Research			
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1969			
OWTS Policy	Water Quality Control Policy for Siting, Design, and			
	Operation and Maintenance of Onsite Wastewater			
	Treatment Systems			
SB	State Bill			
Small Domestic Systems	Small Domestic Wastewater Treatment Systems			
Small Domestic Systems	WQO-2014-0153-DWQ General Waste Discharge			
Order	Requirements for Small Domestic Wastewater Treatment			
	Systems			
§	Section			
TDS	Total dissolved solids			
WDR	Waste Discharge Requirement			
USFW	United States Fish and Wildlife Service			
USGS	U.S. Geological Survey			
WDR	Waste Discharge Requirement			
WQO	Water Quality Order			

### 1 Introduction

# 1.1 Overview and Regulatory Guidance

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

The most similar, extant general permit, WQO-2014-0153-DWQ General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (Small Domestic Systems Order), regulates the discharges from small domestic wastewater treatment and disposal systems. Discharges regulated by the Small Domestic Systems Order must be equal to or under a monthly daily average of 100,000 gallons per day of discharge and flows greater than 20,000 gallon per day must be evaluated to determine whether a nitrogen effluent limit may be required. The Small Domestic Systems Order does not require evaluation of nitrogen effluent concentrations for domestic discharges less than or equal to 20,000 gpd.

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

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

This Initial Study was prepared based upon typical limited domestic systems. Since it is speculative to estimate the type, size, and location of any expanded or new facility, this evaluation makes no attempt to quantify the impacts from the construction and operation of expanded or new facilities. The Regional Water Board also does not specify the methods in which dischargers can choose to comply with the Limited Domestic Order. Thus, the level of analysis is of a general nature and is commensurate with that level of detail. At the time of approval of a specific project, a project-level environmental analysis may be performed by the local approval agency.

This analysis addresses new or expanding domestic wastewater systems with a monthly average flow rate of 100,000 or less gallons per day. The Limited Domestic Order is not expected to lead to any change in the quantity or type of discharge from existing facilities. For existing facilities, the adoption of the Limited Domestic Order is not expected to result in changes to existing baseline conditions except to the extent a requirement leads to updates or improvements to existing systems in order to comply with effluent limitations. The type and location of any specific change to an existing system to comply with effluent limitation is speculative. Whether a discharger chooses to implement an update is dependent on the nature and type of detections as well as site specific conditions and the characteristics of the existing facility. Any existing facilities that would be enrolled under this permit would have less than or equal to the same foreseeable effects on the environment as a new or expanding wastewater facility and thus this analysis focuses on the impacts associated with new or expanded systems.

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 Lahontan 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 Limited Domestic Order.

# 1.3 Purpose and Organization of this Document

The purpose of this Initial Study is to evaluate the reasonably foreseeable potential environmental impacts that may occur as a result of adopting the Limited Domestic

Order. The objective of the Limited Order is to streamline the regulatory process for limited domestic wastewater discharges to land.

The document is organized as follows:

- Chapter 1, "Introduction," describes the purpose and organization of this document.
- Chapter 2, "Regulatory Setting and Project Description," provides background information about the regulatory setting, environmental setting, and provides a description of the proposed project.
- Chapter 3, "Potential Environmental Impacts," uses the environmental factors
  provided in the CEQA Guidelines' Environmental Checklist to evaluate a range of
  potential impacts.

As a discretionary action, issuance of the Limited Domestic Order fits the CEQA definition of a project (Pub. Resources Code, § 21065 (c)). The Lahontan Water Board, as the project's lead agency, has consulted with state responsible and trustee agencies before deciding whether a project's impacts are significant (Pub. Resources Code, § 21080.3; Cal. Code Regs., tit. 14, § 15063) and prior to determining what type of CEQA document to prepare. The list of agencies consulted was developed with assistance from the California Office of Planning and Research. A draft Initial Study was transmitted by January 1, 2020 to all identified agencies.

### 1.4 Public Review and Comment

This Initial Study will be available for a 30-day public review and comment period as described in the Notice of Public Hearing. Comments must be received during the comment period to be considered prior to the meeting. If you have any questions about document availability or the public review and comment process, please contact Carly Nilson at (530) 542-5445 or <u>carly.nilson@waterboards.ca.gov.</u>

# 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 limited domestic system discharges and other sources of contaminants that have the potential to cause adverse water quality effects. These laws include the federal Water Pollution Control Act of 1972 (Clean Water Act), Safe Drinking Water Act of 1974, subsequent amendments to these laws, and California's Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act), subsequent amendments to the Porter-Cologne Act, and related state policies.

California has nine Regional Water Boards that work independently of each other but in cooperation with the environmental and public health agencies of the counties, cities,

and, in some cases, special districts that have been created to help regulate discharges from small domestic systems.

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

- Water Code section 13260 requires each of the following persons to file with the appropriate Regional Water Board a report of the discharge, containing the information that may be required by the Regional Water Board:
  - 1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.
  - 2) A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.
  - 3) A person operating, or proposing to construct, an injection well.
- Water Code section 13263 requires the Regional Water Board to prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge to implement any relevant water quality control plans (Basin Plans) and take into consideration the beneficial uses to be protected and nuisance to be prevented. Water Code section 13263(i) allows general WDRs for a category of discharges if certain criteria are met.
- Water Code section 13264 prohibits dischargers to initiate any new discharge of
  waste or make any material changes in any discharge, or initiate a discharge to,
  make any material changes in a discharge to, or construct, an injection well prior
  to the filing of a report of waste discharge and issuance of waste discharge
  requirements or a waiver of WDRs.

### 2.2 Wastewater Constituents of Concern

The primary concerns associated with waste discharges to land are: (1) exposure to untreated wastewater and the pathogens it may contain; (2) degradation of groundwater quality; and (3) odors from overloaded or upset treatment plants. Regulations and/or orders are developed ensure that waste discharges are treated to acceptable levels prior to being discharged to land.

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

**Table 1 Typical Wastewater Constituents of Concern** 

Constituent of	Reason for Concern
Concern	

Total Dissolved Solids (TDS), scum, and sludge	Wastewater discharges to subsurface leach fields or seepage pits with excessive dissolved solids, scum or sludge can clog the soil matrix. Excessive dissolved solids, scum, or sludge may shield pathogenic organisms from disinfectants in disinfected effluents.
Nitrate	Nitrate can be a groundwater contaminant, and when concentrations are high in drinking water, it poses a human health concern associated with methemoglobinemia.
Pathogens	Pathogenic organisms can cause communicable diseases through direct and indirect body contact, or ingestion of contaminated water.
Biochemical oxygen demand (BOD)	A measurement of the concentration of biodegradable organic content in wastewater. The value represents the amount of oxygen required by microorganisms while oxidizing the waste constituents under aerobic conditions.
Source: Adapted from	US EPA 2005, Tchobanoglous and Burton 2003

# 2.3 Background

In 1997 the State Water Board issued a General Water Quality Order (<u>WQO-97-10-DWQ</u>) for land application of treated wastewater from small domestic systems with an average flow rate up to 20,000 gpd. The Regional Water Boards have relied upon WQO-97-10-DWQ as a baseline for permitting small domestic systems since 1997 until the State Water Resources Control Board issued Water Quality Order (<u>2014-0153-DWQ</u>) in 2014. The Small Domestic Systems Order is applicable statewide and allows a monthly average flow rate up to or equal to 100,000 gpd. For flow rates that exceed 20,000 gpd, nitrogen effluent concentration limits are required.

# 2.4 Project Description

The Lahontan Water Board is preparing a Limited Domestic Order for treated wastewater from limited domestic systems to land that will be applicable regionwide (Figure 1). The Lahontan Water Board will have discretion whether to enroll dischargers in the Limited Domestic Order, site-specific WDRs, or another administrative mechanism. The Limited Domestic Order establishes nitrogen effluent limits and associated monitoring for domestic discharges less than or equal to a monthly average flow rate of 100,000 gallons per day. The State Water Resources Control Board Water Quality Control Policy for Siting, Design, and Operation and Maintenance of Onsite Wastewater Treatment Systems (OWTS Policy) and associated waiver of waste discharge requirements establishes a statewide, risk-based, tiered approach for regulation and management of installations and replacements of OWTS with disposal of domestic strength and, in limited instances, high strength wastewater generated from domestic sources. Generally, facilities that are identified as Tier 0, Tier 1, Tier 2, Tier 3, and Tier 4 facilities will continue to be regulated under the OWTS Policy. There is

discretion of the Regional Board to determine if a facility does not qualify for one of the tiers in the OWTS Policy and to enroll it under this Limited Domestic Order. Also, this Limited Domestic Order does not supersede an existing Local Area Management Plan (LAMP).

Wastewater treatment systems will vary from septic tanks to activated sludge treatment facilities to pond facilities for this Limited Domestic Order. The minimum level of treatment will be determined by requirements of the Limited Domestic Order. The Limited Domestic Order may be used by Regional Water Boards to streamline permitting of limited domestic wastewater systems, which typically are a relatively low threat to groundwater quality. The systems covered by the Limited Domestic Order would discharge to land only; discharge to surface water bodies is prohibited.

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

- Septic tanks and associated subsurface leach fields provide the lowest level of acceptable treatment. The tank and leach field are generally below ground and covered with grass or similar shallow rooted vegetation. Depending on the source of wastewater and size of tank, the septic system may need to be pumped once per one to five year(s).
- Aerobic treatment units are typically integrated in a treatment train with other wastewater treatment components. Aerobic treatment units provide air that is mixed with wastewater inside a treatment unit. Aerobic bacteria consume the organic matter in the sewage. Aerobic treatment units are also generally equipped with recirculation pumps and associated controls. A negligible amount of pump and air blower noise is generated. Aerobic treatment units require more frequent service and solids removal than a septic tank. Depending upon the source of wastewater, an aerobic treatment unit may require three or four visits per year by a septic pumping service.
- Package treatment systems typically use the activated sludge method to
  aerobically treat wastewater. Activated sludge systems must remove sludge
  waste regularly; therefore, sludge handling and storage equipment is needed.
  Package treatment systems can be installed outdoors or within a garage-sized
  building. Sludge is typically settled in clarifiers or small ponds. Sludge can be
  treated in a variety of ways. It can be dried before hauling, thickened to reduce
  the volume, or hauled with minimal treatment. Depending upon how sludge is
  stored and treated, it may require monthly removal. Activated sludge treatment
  systems employ pumps and air blowers, which result in a low level of noise.
- Membrane Biological Reactor (MBR) (membrane bioreactor) systems use
  the activated sludge method and then filter the oxidized wastewater using
  membrane technology. The process is similar to activated sludge, replacing the
  clarifier with membrane filtration. Similar to activated sludge, pumps and air

blowers are required and sludge must be handled regularly. A low level of noise is associated with an MBR system.

Pond treatment systems can be equipped with mechanical aerators or rely
upon diffusion of atmospheric oxygen and/or oxygen generated by pond algae to
oxidize waste constituents. Pond systems occupy the largest footprint of the
treatment systems. Pumps and mechanical aerators generate low levels of noise,
but pond systems are generally large enough that the noise is confined to the
wastewater facility. Ponds can be subject to upset due to excessive BOD
loadings, toxic discharges, or seasonal odor generation if thermally stratified
ponds mix. Well operated systems typically do not generate objectionable odors.

The footprint of a disposal facility for treated wastewater will vary with the size of the discharge and disposal method. The smallest disposal facility is typically a leach field associated with a septic tank or aerobic treatment unit for private residences. In situations where soil type is unfavorable or high groundwater conditions exist, an atgrade or mound dispersal system may be used. Percolation ponds are generally employed at larger facilities with higher flow rates.

Compliance with the Limited Domestic Order is documented by self-monitoring reports submitted to the Regional Water Board quarterly and annually. This includes regularly reporting the results of observations and analytical data related to compliance. In addition, technical reports may be required to determine the effectiveness of the limited domestic system. The Executive Officer may require additional investigations or monitoring to demonstrate beneficial uses of water are protected and antidegradation requirements are satisfied including, but not limited to, evaluation of the wastewater system's treatment performance, groundwater monitoring, or additional sampling to characterize the wastewater discharge.



Figure 1. Lahontan Regional Water Quality Control Board Boundary

# **3 Potential Environmental Impacts**

# 3.1 Bioregional 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.

The Lahontan Region of California is divided into 3 bioregions: Modoc, Sierra, and Mojave Desert (Figure 2).



Figure 2 California Bioregions

# 3.1.1 Modoc Bioregion

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

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

### 3.1.2 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 (Forests Forever 2018). This bioregion encompasses portions of the Lahontan, Central Valley, and Mojave Hydrologic Regions.

### 3.1.3 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 (Forests Forever 2018). The Mojave Desert Bioregion is within the southern portion of the Lahontan Hydrologic Region.

# 3.2 Hydrology<sup>1</sup> Environmental Setting

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

# 3.2.1 Precipitation

There is relatively abundant precipitation in the state, but most 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 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.

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<sup>&</sup>lt;sup>1</sup> 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: < https://pubs.usgs.gov/ha/ha730/ch\_b/ >; Cal Water. 1999. California Interagency Watershed Map of 1999.

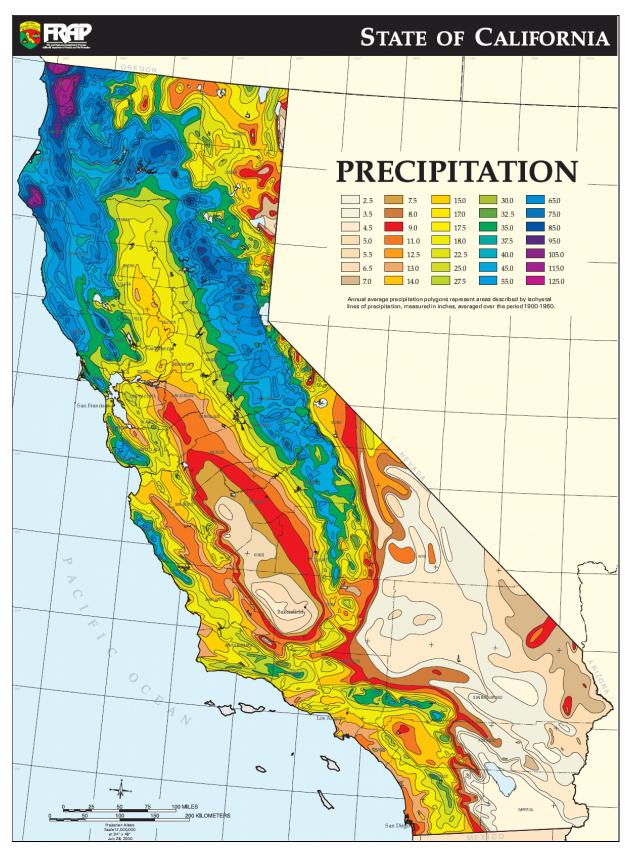


Figure 3 Annual Precipitation Rates in California (CDF, 2011)

#### 3.2.2 Runoff

Runoff is the amount of water left from precipitation that can be measured as stream flow after losses to evaporation, transpiration by plants, and the replenishment of storage within the aquifers. The areal distribution of runoff closely follows the areal distribution of precipitation. Runoff is greatest in the mountains (exceeding 40 inches per year in many areas), where most of the 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.

### 3.2.3 Water Surplus and Deficit

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

In most of southern California, nearly all streams that arise in the mountains are ephemeral and lose flow to alluvial aquifers within a short distance of where the streams leave the mountains and emerge onto the valley floors.

# 3.3 Hydrologic Regions of California<sup>2</sup>

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

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

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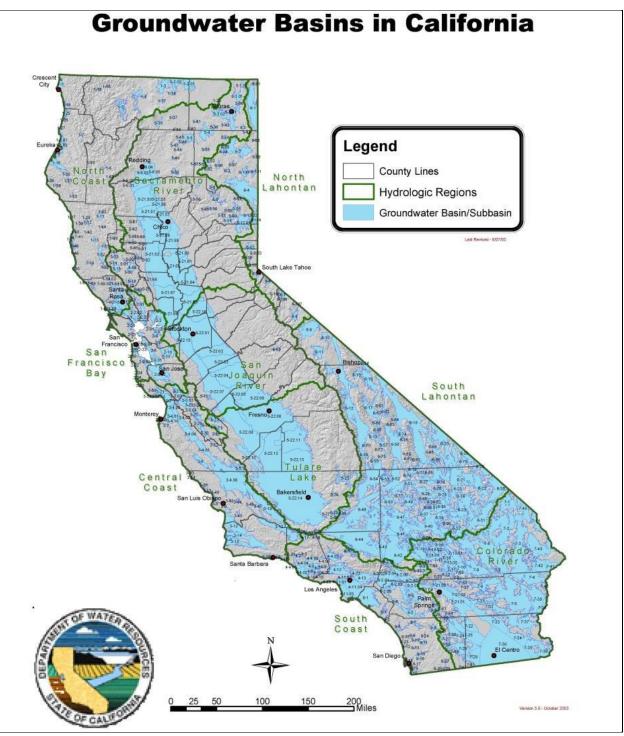


Figure 4 Hydrologic Regions and Groundwater in California (DWR 2003)

# 3.3.1 North Lahontan Hydrologic Subregion

The North Lahontan Hydrologic Subregion consists of the western edge of the Great Basin, and water in the region drains eastward toward Nevada. Groundwater in the northern half of this subregion is primarily contained in basin-fill and volcanic rock aquifers, with some fractured hard rock zones. The southern half of this region is

dominated by fractured hard rock zones, but small segments of basin-fill aquifers also exist in this part of the subregion. In general, the water quality in the North Lahontan Hydrologic Subregion is good. In basins in the northern portion of the region, groundwater quality is widely variable. The groundwater quality along these basin margins tends to be of higher quality, but the potential for future groundwater pollution exists in urban and suburban areas where single-family septic systems have been installed, especially in hard rock areas. Groundwater quality in the alpine basins ranges from good to excellent.

# 3.3.2 South Lahontan Hydrologic Subregion

The South Lahontan Hydrologic Subregion is bounded on the west by the crest of the Sierra Nevada, on the north by the watershed divide between Mono Lake and East Walker River drainages, on the east by Nevada, and on 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 because of human-induced activities. Drinking water standards are most often exceeded for TDS, fluoride, and boron content. Groundwater near the edges of valleys generally contains lower TDS content than water beneath the central part of the valleys or near dry lakes.

### 3.4 Environmental Checklist

The Lahontan Water Board has prepared this Initial Study to evaluate reasonably foreseeable environmental impacts and determine if a significant impact to the environment is likely with of adoption of the Limited Domestic Order. Reasonably foreseeable environmental impacts are based on the existing conditions (including non-permitted, unsanctioned uses) at time the CEQA analysis is being prepared. The adoption of the Limited Domestic Order is for regionwide application and does not address a specific site. The subsequent evaluation of the environmental factors only considers potential environmental impacts that may result from construction and operation of typical limited domestic systems instead of systems with specific types and locations. 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. The Lahontan Water Board has the discretion whether to use the Limited Domestic Order or require individual WDRs for regulatory coverage on a site-by-site basis. Furthermore, local land use authorities have discretion over approval, siting, and design of new and expanding facilities.

Unregulated discharge of wastewater from limited domestic systems can create environmental risks to groundwater quality and public health. The Limited Domestic Order contains requirements that reduce the potential risks and the impacts from the project are expected to be "less than significant impact" or "no impact" levels. The Lahontan Water Board cannot speculate on how many facilities may be covered as a result of the Limited Domestic Order and is not able to determine the location or design of any facilities.

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

For the environmental analysis of the checklist below, any conditions and/or requirements of the Limited Domestic Order are considered project design features and are not evaluated as mitigation measures. Any environmental impacts associated with the Limited Domestic Order are expected to be less than significant impacts. The Limited Domestic Order does not alter or supersede any regulations of other agencies. The scope of this project only addresses limited domestic wastewater treatment systems from facilities generating domestic wastewater at a rate of less than or equal to monthly average flow rate of 100,000 or less gallons per day and not regulated by either an existing general order, an existing individual order, or a LAMP. Given the small scale of these projects, no significant impact is expected, and the Limited Domestic Order will provide more stringent regulation than is currently in place at the statewide level.

PROJECT INFORMATION				
Project Title:	General Waste Discharge			
	Requirements for Limited Domestic			
	Wastewater Treatment Systems			
Lead agency name and address:	Lahontan Regional Water Quality			
	Control Board			
	2501 Lake Tahoe Blvd.			
	South Lake Tahoe CA 96150			
Contact person and phone number:	Carly Nilson			
	Lahontan Region Cannabis Program			
	(530) 542-5445			
Project Location:	Lahontan Region			
Project sponsor's name and address:	Lahontan Regional Water Quality			
	Control Board, 2501 Lake Tahoe Blvd.,			
	CA 96150			
General plan description:	Not Applicable			
Zoning:	Not Applicable			
Description of project:	See Chapter 2.4 Project Description			

Surrounding land uses and setting; briefly describe the project's	Lar	nontan Reç	gion		
surroundings:					
Other public agencies whose approval	Nor	าe			
is required (e.g. permits, financial					
approval, or participation agreements):					
3.4.1 Aesthetics					
<b>AESTHETICS</b> : Except as provided in Public Resources Coc Section 21099, would the project:	de	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?					
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings wit a state scenic highway?					
c) In non-urbanized areas, substantially degrade the existing visual character or quality public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?					
d) Create a new source of substantial light or glare which we adversely affect day or nighttime views in the area?	ould				

### DISCUSSION

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

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

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

Moderate sized systems may include additional treatment such as activated sludge package plants or recirculating sand filters. In most cases, the components are constructed at least partially below ground or within a structure to limit public access. Moderate sized systems are generally constructed near developed areas, but their

relative size to treatment capacity allows them to be concealed within garage sized buildings or behind fenced areas and sightline screening vegetation.

Wastewater pond systems require the largest footprint. As a result, pond systems are generally located where there is available land and are often fenced for public safety. For the purposes of the Limited Domestic Order, most systems will be smaller in scale due to the maximum capacity of treating domestic wastewater which allows a monthly average flow rate equal to or less than 100,000 gallons per day.

Siting criteria of the local authority will continue to establish appropriate locations for new structures or modifications to existing structures on a site-specific basis, accounting for scenic vistas. Many local agencies have ordinances in place establishing standards for construction within scenic areas and established local land use and zoning requirements. The Limited Domestic Order will not affect those requirements. The potential impacts of the Limited Domestic Order on scenic vistas are considered less than significant.

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 approximately 400 miles of state designated scenic highway resources in the Lahontan Region. Although the facilities covered by the Limited Domestic Order could be constructed within the view shed of scenic highways, federal, state and local regulations would prohibit these facilities from being constructed within highway rights-of-way. Because above ground portions of these facilities would be relatively low-profile and would be located outside of highway rights-of-way, impacts to scenic highways would be less than significant. The nature of these facilities would also preclude construction in or on historic buildings and rock outcroppings.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

**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 of the area?

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

Limited Domestic Order will not create new sources of light or glare. The Limited Domestic Order will have a less than significant impact on day or nighttime views in the area.

# 3.4.2 Agriculture Resources

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:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			$\boxtimes$	
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))?				
d) Result in the loss of forest land or conversion of forest land to non-forest use?			$\boxtimes$	
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?				

### DISCUSSION

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less than Significant Impact. Installation of new or expanding wastewater systems could occur on a wide variety of soil types throughout the Lahontan Region, including areas that could be categorized under the Farmland Mapping and Monitoring Program as Farmland of Statewide Importance and Prime or Unique Farmland. The Limited Domestic Order does not cover systems designed to treat agricultural waste and the scale of the facilities covered under the Limited Domestic Order would not trigger any large scale land conversion. Any systems constructed on agricultural land would be incidental to the residential uses associated with farm

operations. Therefore, systems constructed on agricultural lands would be relatively small and would allow continued use of the land for agricultural purposes.

The Limited Domestic Order does not change zoning or land use designation and will not alter the economics of farmland conversion to other uses. Domestic wastewater systems are often constructed or expanded to address a population need, occurring in areas that are already designated for residential uses. It is not reasonably foreseeable that the Limited Domestic Order would lead to a change in number of housing construction or expansion that would require the conversion of farmland.

In addition, conversion of farmland to other uses would be a necessary precursor to residential development and associated wastewater system construction. Prior to conversion of farmland to other uses, entitlements would be required by local land use authorities and a project specific CEQA evaluation would be performed, which would include any new or expanding wastewater systems seeking coverage under the Limited Domestic Order. The issue of farmland conversion will be evaluated on a site-specific basis as these projects are identified.

The potential impacts of the Limited Domestic Order on such farmland are considered less than significant.

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

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

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

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

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

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

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

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

### 3.4.3 Air Quality

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			$\boxtimes$	
b) 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?				
c) Expose sensitive receptors to substantial pollutant concentrations?			$\boxtimes$	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people)?			$\boxtimes$	

#### DISCUSSION

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

**Less than Significant Impact.** Although this evaluation does not address project specific impacts, the potential for conflict or violation of an air quality plan is low. Nearly all equipment at a limited domestic system is powered by electricity. Emergency generators powered by stationary internal combustion engines that

exceed a horsepower rating (typically 50 HP) must be permitted by local air quality management districts. Emergency electrical generators are typically required at wastewater systems to power essential equipment as a backup power source. The use of emergency equipment is generally limited to short-term uses. The additional air quality impacts caused by these systems would be negligible and the overall air quality impacts caused by the uses for which the systems would serve would be analyzed by the local land use authority permitting agency. The adoption of the Limited Domestic Order will not supersede or alter any existing regulations or requirements of other agencies.

Construction of such systems generally requires very few construction vehicles. Construction related air quality impacts are expected to be minor, short term, and would be temporary. The systems are also very small in size, and so any affects considered negligible. The Limited Domestic Order would result in less than significant impacts to implementation of an applicable air quality plan.

b) 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?

**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.

c) Expose sensitive receptors to substantial pollutant concentrations?

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

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. Well operated wastewater systems do not generally produce emissions. However, overloaded treatment systems may generate odors if subjected to upset due to excessive BOD loading, toxic discharges, or seasonal odor generation if thermally stratified ponds mix. The Limited Domestic Order requires that any nuisance odors are not perceivable beyond the property line of the wastewater treatment facility. The facility could be subject to enforcement action if complaints are received by the Lahontan Water Board by any member of the public beyond the property line of the facility. Adoption of the Limited Domestic Order will have a less than significant impact in creating objectionable odors.

# 3.4.4 Biological Resources

IV. BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 Game or U.S. Fish and Wildlife Service?				
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 Game or US Fish and Wildlife Service?				
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
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?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
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?			$\boxtimes$	

#### 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 Limited Domestic Order limits the wastewater discharge to monthly average flow rate equal to or less than 100,000 gallons per day; therefore, it addresses relatively small wastewater systems that will consist of limited areal extant facilities. Discharges to surface waters is prohibited by the Limited Domestic Order, including wetlands. Therefore, the discharges are unlikely to affect a species identified as a candidate, sensitive, or special status species.

Based on the small size of the wastewater systems, a substantial adverse effect on biological resources is unlikely. However, due to the great number of special status species throughout the Lahontan Region, impacts will be evaluated on a case-by-case basis. As individual facilities are proposed for construction, siting would be evaluated by local land use authorities. Most local authorities siting criteria includes protection of environmentally sensitive areas and this includes proximity to habitats of threatened and endangered species. As per Limited Domestic Order

requirements, applicants for any new or expanding facilities will need to consult the California Natural Diversity Data Base (CNDDB) to ensure the facility is not located in an area of rare plants and animals in California.

If there is the potential to have a substantial adverse effect on species identified as a candidate, sensitive, or special status species (protected species) in local or regional plans, policies, or regulation, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife (USFW), applicants will not qualify for the Limited Domestic Order and coordination will be recommended with applicable agency to avoid impacts. Adoption of the Limited Domestic Order will not have a substantial adverse effect on any candidate, sensitive, or special status species.

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

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

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

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

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

Less than Significant Impact. Adoption of the Limited Domestic Order will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with the established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. This will be accomplished through avoidance measures in addition to the implementation of appropriate BMPs. The Limited Domestic Order will only regulate small facilities that will have a negligible footprint on the landscape. In addition, see the response to item (a) above.

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

**Less than Significant Impact.** The Limited Domestic 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 item (a) above.

#### 3.4.5 Cultural Resources

V. CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?			$\boxtimes$	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			$\boxtimes$	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			$\boxtimes$	

#### DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA section 15064.5?

**Less than Significant.** Adoption of the Limited Domestic Order will not result in a substantial adverse change to the significance of any cultural resource.

The Limited Domestic Order requires that prior to project implementation, a record data search will be conducted. If a California Historical Resources Information System (CHRIS) records search indicates that the cultural sensitivity of a project area is unknown or is identified as sensitive for cultural resources, the facility will not qualify for the Limited Domestic Order and site-specific CEQA will be necessary.

Despite diligent advance research, inadvertent discoveries may occur. In such cases, work crews will stop work in the vicinity of a cultural resource discovery to avoid damage until a qualified archaeologist can assess the significance of the find. If necessary, treatment measures will be developed in consultation with appropriate agencies and tribal representatives. Such measures could include requiring that the site be avoided, conducting recovery excavations, and/or capping the site to avoid further disturbance of artifacts.

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

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

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

Less than Significant. See the response to item (a) above. Adoption of the Limited Domestic Order will not have a substantial adverse effect on human remains. However, specific projects seeking coverage under the Limited Domestic Order may have the potential to encounter human remains during construction activities. Upon discovery of human remains, project proponents will need to comply with Health and Safety Code section 7050.5 and Public Resources Code section 5097.98. The following actions will be taken immediately upon the discovery of human remains:

Work in the vicinity of the discovery will stop immediately and the county coroner will immediately be notified. The coroner has two working days to examine human remains after being notified by the responsible person. If the remains are Native American, the coroner has 24-hours to notify the Native American Heritage Commission. The Native American Heritage Commission will immediately notify the person it believes to be the most likely descendent of the deceased Native American. The most likely descendent has 48-hours of being granted access to the site to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and any associated grave goods.

# 3.4.6 Energy

VI. ENERGY: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			$\boxtimes$	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			$\boxtimes$	

#### **DISCUSSION:**

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction and operation?

Less than Significant Impact. Construction of a wastewater system involves the use of heavy equipment for hauling, excavation, etc. that requires negligible energy. The construction phase is of limited duration and a small footprint; therefore, it would not create a significant impact on the environment. Local land ordinances require construction during daylight hours, limiting any energy consumption specific to illuminating project construction area.

Operation of a limited domestic system normally uses electricity for pumps and mechanical aerators. Because operators pay for electricity based on usage, they are incentivized to employ efficient practices wherever possible.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

**Less than Significant Impact**. The adoption of the Limited Domestic Order will not supersede or alter any state or local plans or ordinances.

# 3.4.7 Geology and Soils

3.4.7 Geology and Solis				
VII. GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause 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?				
ii) Strong seismic ground shaking?				
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?				
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?				
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?				
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?			$\boxtimes$	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			$\boxtimes$	

#### DISCUSSION:

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

Less than Significant Impact. Adoption of the Limited Domestic Order will not have a substantial adverse effect caused by geologic or soil conditions. In general, there are few employees at a wastewater facility so the exposure to people or structures from seismic related events is generally small. The Limited Domestic Order requires that the siting, design, construction, and operation of the wastewater system shall comply with the requirements of the Basin Plan. Any constructed facility will be designed and reviewed by a licensed Civil Engineer and will be built in accordance with California seismic design standards. The structures associated with small nondomestic wastewater treatment systems are usually small one-story structures constructed in accordance with current seismic standards contained in the Uniform Building Code.

Therefore, substantial adverse effects including risk of loss, injury, or death are unlikely. In addition, the siting criteria of the local agencies will establish appropriate locations and seek to avoid or minimize, on a site-specific basis, any potential for risk to people or structures. The Limited Domestic 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.** The Limited Domestic Order requires an erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.

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

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

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

Less than Significant Impact. Adoption of the Limited Domestic Order will not have a substantial adverse effect caused by expansive soils creating substantial risks to life or property. Most new or expanding projects will have a project engineer/geologist for geotechnical investigations where applicable and soils must be adequate to support any wastewater construction. Based on the structures that are typical at limited domestic systems, substantial adverse effects including risk of loss, injury, or death are unlikely. The Limited Domestic Order itself will result in a less than significant impact associated with geology and soils.

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

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

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

Less than Significant Impact. The Limited Domestic Order requires that prior to project implementation, a record data search will be conducted. If a California Historical Resources Information System (CHRIS) records search indicates that a project area is unknown or is identified as sensitive for unique geologic features based on any mining, soil survey, or other geological maps or reports the facility will not qualify for the Limited Domestic Order and site-specific CEQA will be necessary. The Limited Domestic Order requires the submittal of geologic information to ensure the area is appropriate for an on-site disposal system, preventing unique geologic resources from being adversely impacted.

Despite diligent advance research, inadvertent discoveries may occur of paleontological resources. In such cases, work crews will stop work in the vicinity of a cultural resource discovery to avoid damage until a qualified archaeologist can assess the significance of the find. If necessary, treatment measures will be developed in consultation with appropriate agencies and tribal representatives. Such measures could include requiring that the site be avoided, conducting recovery excavations, and/or capping the site to avoid further disturbance of artifacts.

### 3.4.8 Greenhouse Gas Emissions

VIII. GREENHOUSE GAS EMISSIONS: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

### **DISCUSSION**

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

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

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

Operation of a limited domestic system normally uses electricity for pumps and mechanical aerators. Because operators pay for electricity based on usage, they are incentivized to employ efficient practices wherever possible.

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

Although limited domestic systems contribute a small amount of GHGs, the Limited Domestic Order will not affect the number of systems or the volume of wastewater discharged to the systems. Many of these systems are already covered by the

existing WQO-2014-0153-DWQ. Any new or expanding facilities are small in scope and by nature, have minimal emissions. The proposed Limited Domestic Order will not contribute to cumulative air quality impacts. Other sources of air emissions, such as transportation, industrial activities, and power generation, are the major contributors to significant cumulative air quality impacts.

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

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

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

### 3.4.9 Hazards and Hazardous Materials

IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard 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?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
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?				

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 or excessive noise for people residing or working in the project area?			
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		$\boxtimes$	
g) Expose people or structure, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?		$\boxtimes$	

## DISCUSSION

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

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

It is anticipated that most limited domestic systems will not store hazardous materials. However, some systems may be required to disinfect wastewater. That activity may be associated with the use and storage of hazardous materials. In general, these systems employ liquid sodium hypochlorite as a disinfectant rather than chlorine gas, largely due to the safety concerns and cost of maintaining chlorine gas for that activity. Less frequently, wastewater systems are required to adjust pH which may require storage of acid or base chemicals. Local authorities may limit the volume and means of on-site storage for such chemicals through the provisions of California Building Code. Use of holding tank chemicals shall be discouraged by the wastewater system owner/operator. For new or expanding systems within or nearby the boundaries of a centralized wastewater district or regional service area, the permittee must demonstrate a good faith effort to connect to the centralized system when feasible and practicable or provide evidence that connection to the system was not approved.

Hazardous materials are defined and regulated under several federal and state statutes and associated regulations. The Limited Domestic Order does not change any regulations pertaining to hazardous materials.

The Limited Domestic Order requires the use of nonhazardous decomposable waste as a soil amendment pursuant to applicable best management practices, provided that the Lahontan Water Board may issue waste discharge or reclamation requirements for such use. Title 27, Section 20090(b) wastewater also applies to the Limited Domestic Order, and so does not allow for hazardous waste discharge. The Limited Domestic 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 or excessive noise for people residing or working in the project area?

Less than Significant Impact. The Limited Domestic Order would not add population or housing to areas. Limited domestic systems may be located in the vicinity of an airport or airstrip, but they would not add substantial numbers of employees or any residents to these areas. Because of the small nature of the facilities, minimal noise would be generated. The Limited Domestic Order would not otherwise create safety hazards or excessive noise within the vicinity of an airport or airstrip.

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

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

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

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

## 3.4.10 Hydrology / Water Quality

X. HYDROLOGY AND WATER QUALITY: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the additional of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;			$\boxtimes$	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or ff-site;			$\boxtimes$	
ii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
iv) impede or redirect flood flows?				
d) In a flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			$\boxtimes$	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			$\boxtimes$	

### DISCUSSION

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. Adoption of the Limited Domestic Order will not violate any water quality standards or waste discharge requirements. The Limited Domestic Order will be implemented by the Lahontan Water Board and compliance with the Basin Plan is required. The Limited Domestic Order requires a discharger seeking enrollment to design an appropriate method of wastewater treatment based on site-specific conditions. Discharges are required to meet nitrogen effluent limits.

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

The Limited Domestic Order prohibits the discharge to cause or contribute to exceedances of groundwater limitations, which are based on water quality objectives contained in the Basin Plan. It also requires discharge and treatment setback for wastewater treatment and dispersal areas from domestic wells, flowing or ephemeral stream, lakes or reservoirs, and property lines. Setbacks provide attenuation of wastewater constituents through physical, chemical, and biological processes. The setbacks provided in this Limited Domestic Order are based on existing water quality protective setbacks, including those from the California Well Standards, the OWTS Policy, the California Plumbing Code, and commonly imposed setbacks by regulatory agencies.

Occasional WDR violations or accidental discharges could occur if the treatment systems do not function properly, but monitoring provisions imposed by the Regional Water Boards would be expected to identify such circumstances so that they can be corrected. The Lahontan Water Board also has the authority to issue cleanup actions to cleanup or abate conditions of pollution or nuisance resulting from unintentional or unauthorized releases of waste or pollutants to the environment.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

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

The Limited Domestic Order does not change zoning or land use designation and would not alter the economics of converting land to residential uses, so the Limited Domestic Order will not increase residential development and associated groundwater extraction. On-site land discharge will help preserve groundwater supply as opposed to hauling wastewater offsite for treatment. A less than significant impact to groundwater recharge is anticipated as a result of adoption of the Limited Domestic Order.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

**Less than Significant Impact.** Limited domestic systems are not allowed to be constructed in drainage areas that would require changing the course of a stream or river. Wastewater discharge will only be to land, and the Limited Domestic Order also requires discharge and treatment setback for wastewater treatment and dispersal areas from domestic wells, flowing or ephemeral stream, lakes or

reservoirs, and property lines. Construction activity will be performed consistent with a construction stormwater permit to minimize erosion and siltation issues.

i. Result in substantial erosion or siltation on- or off-site;

Less than Significant Impact. Limited domestic systems that can be covered under the Limited Domestic Order typically contain the precipitation that falls on the facility footprint. Because all wastewater is treated prior to discharge, and wastewater is contained in treatment systems at the wastewater facility, discharge of polluted runoff is unlikely to occur, limiting any potential erosion. The Limited Domestic Order also requires that all pond systems shall have an erosion control program implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface. The adoption of the Limited Domestic Order will not change any existing regulatory program that addresses stormwater runoff and erosion, including the Lahontan General Permit that establishes WDRs for small construction projects, the State Board General Construction Permit, the State Board General Industrial Permit, or any local design ordinances.

- ii. 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 response to item (i) above. The Limited Domestic Order requires that pond systems shall have capacity to accommodate wastewater, design seasonal precipitation, ancillary inflow/infiltration (I/I), and wind driven waves.
- iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

**Less than Significant Impact.** See response to item (i) and (ii) above.

iv. Impede or redirect flood flows?

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

The Limited Domestic Order will include setbacks for wastewater treatment areas, dispersal areas, flowing or ephemeral streams, lakes or reservoirs, and property lines. Setbacks provide attenuation of wastewater constituents through physical, chemical, and biological processes. All systems are only permitted for land application and will be designed with a capacity to prevent flooding; therefore, the project is expected to have a less than significant impact.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

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

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**Less than Significant Impact**. The Limited Domestic Order requires the discharge to comply with the Basin Plan, not pollute groundwater or surface water, or negatively impact any beneficial use.

3.4.11 Land Use / Planning

XI. LAND USE AND PLANNING: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?			$\boxtimes$	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

#### DISCUSSION

a) Physically divide an established community?

**Less than Significant Impact.** The Limited Domestic Order addresses wastewater collection, treatment, and disposal, which would provide a necessary service for existing or planned and permitted communities. Furthermore, the Limited Domestic Order is unlikely to conflict with another agency's plan and does not address zoning or land use designations. Therefore, the project is not expected to physically divide an established community.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact. Adoption of the Limited Domestic Order is not expected to conflict with any applicable land use plan, policy, or regulation. The Limited Domestic Order is consistent with policies of the State Water Board and Regional Water Boards. The Limited Domestic Order is unlikely to conflict with another agency's plan as it does not alter or supersede any other agencies authority, nor does it not address zoning or land use designations. Such changes would require entitlements from local land use authorities.

## 3.4.12 Mineral Resources

XII. MINERAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?				
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?				

### DISCUSSION

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

Less than Significant Impact. Adoption of the Limited Domestic Order is not expected to impact the availability of a known mineral resource. The Limited Domestic Order limits the wastewater discharge to a monthly flow rate equal to or less than 100,000 gallons per day; therefore, it addresses relatively small wastewater treatment systems that will consist of facilities of limited areal extent. Based on the small size of these systems, a substantial adverse effect on mineral resources is unlikely.

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. Furthermore, the Limited Domestic Order is unlikely to conflict with another agency's plan and does not address zoning or land use designations.

#### 3.4.13 Noise

XIII. NOISE: Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b) Generation of excessive groundborne vibration or groundborne noise levels?			$\boxtimes$	
c) For a project located within the vicinity of a private airstrip or 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?				

## DISCUSSION

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact. Construction activities associated with building a limited domestic system will generate noise consistent with the activity. Material delivery and/or earth moving equipment typically involves diesel engines. However, the noise is generally limited to daylight hours. The duration of construction activity varies with the size of the system, from a week for a septic system to a few months for a larger system. These systems will be smaller due to only processing a monthly average flow rate equal to or less than 100,000 gallons per day.

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

Service events for limited wastewater treatment systems such as septic tanks or aerobic treatment units will result in short term noise generated by a vehicle servicing the facilities, which is normally performed during daylight hours. The frequency of servicing septic tanks is dependent on tank size and the discharge but may be once per three years or less frequently. Aerobic treatment units typically require more frequent service and may be as frequent as four times per year. Service events for package treatment systems may occur as frequently as monthly,

depending upon the wastewater system specifics. Pond systems are generally designed so that sludge removal is not needed more frequently than a 10-15 year timeframe.

Most facilities are located in areas without existing POTW infrastructure and so sparely populated. The California Noise Control Act gives individual cities the power to set strict rules for noise reduction and enforce them as necessary. Each community sets its own ordinances so any facility located in a city limit will be subject to any noise ordinances enforced by the city.

b) Generation of excessive groundborne vibration or groundborne noise levels?

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

c) For a project located within the vicinity of a private airstrip or 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 Limited Domestic Order would not add population or housing to areas. Limited domestic systems may be located in the vicinity of an airport or airstrip, but they would not add substantial numbers of employees or any residents to these areas. Because of the small nature of the facilities, minimal noise would be generated.

## 3.4.14 Population / Housing

XIV. POPULATION AND HOUSING: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned 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)?				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

## DISCUSSION

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

**Less than Significant Impact.** The Limited Domestic Order will not alter the number of limited domestic systems that would be constructed in the future; therefore, the Limited Domestic Order is unlikely to induce substantial population growth. Typically, construction of new or expansion of existing wastewater systems

takes place as a response to accompany population growth. The Limited Domestic Order does not change zoning or land use designation which would be required prior to the addition of homes, businesses, roads and infrastructure. Such changes would require entitlements from local land use authorities.

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

**Less than Significant Impact.** Because the Limited Domestic Order only addresses limited domestic systems, displacement of substantial number of existing housing is unlikely. The nature of Limited Domestic Order is to support new small housing development with a streamlined permitting process for limited domestic wastewater treatment.

#### 3.4.15 Public Services XV. PUBLIC SERVICES: Less Than a) Would the project result in substantial adverse physical Potentially Less Than No Significant impacts associated with the provision of new or physically Significant Significant Impact Impact altered governmental facilities, need for new or physically with Impact altered governmental facilities, the construction of which could Mitigation 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?

#### DISCUSSION

Other public facilities?

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?

 $\boxtimes$ 

**Less than Significant Impact.** Wastewater systems will not require additional public services such as fire protection, police protection, schools, parks, and other public facilities. New or expanding wastewater systems would not result in substantial adverse physical impacts associated with provisions of or need for new

or physically altered governmental facilities. Such systems would be constructed in existing or planned and permitted communities.

XVI. RECREATION:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?				
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?				
DISCUSSION				
a) Would the project increase the use of exist other recreational facilities such that substitute would occur or be accelerated?			•	•
Less than Significant Impact. The Limit impact the use of existing neighborhood a	and region	al parks o	•	
facilities. The need for construction of new typically performed to address population				
typically performed to address population	growth, ir	nstead of o	causing the	e growth. n or
typically performed to address population  Does the project include recreational facil expansion of recreational facilities which	growth, ir ities or red might have	nstead of o quire the o e an adve	causing the construction rse physica	e growth. n or
typically performed to address population  Does the project include recreational facil expansion of recreational facilities which the environment?	growth, ir ities or red might have	nstead of o quire the o e an adve	causing the construction rse physica	e growth. n or
typically performed to address population  Does the project include recreational facilities which the environment?  Less than Significant Impact. See the responsible to the project include recreational facilities which the environment?	growth, ir ities or red might have	nstead of o quire the o e an adve	causing the construction rse physica	e growth. n or
typically performed to address population  Does the project include recreational facilities which the environment?  Less than Significant Impact. See the results of the environment of	growth, in ities or recoming the have esponse to Potentially Significant	quire the ce an adverse an adverse tem (a)  Less Than Significant with	causing the construction rse physical above.  Less Than Significant	e growth.  n or  al effect o
typically performed to address population  Does the project include recreational facilities which the environment?  Less than Significant Impact. See the range of the significant impact. See the range of the significant impact.  3.4.17 Transportation  XVII. TRANSPORTATION: Would the project:  a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and	growth, in ities or recoming the have esponse to Potentially Significant	quire the ce an adverse an adverse tem (a)  Less Than Significant with	causing the construction rse physical above.  Less Than Significant Impact	e growth.  n or  al effect o

e)	Result in inadequate emergency access?				
DI	SCUSSION				
a)	Conflict with a program plan, ordinance of including transit, roadway, bicycle, and p		•	the circula	tion system,
	Less than Significant Impact. The impact will not conflict with an applicable plan, of Construction of new or expanding system (mobilization of earth-moving equipment term operation of a limited domestic system activity. Adoption of the Limited Domestic transportation related ordinance. The Limited significant impact on transportation	ordinance, on will have and mater tem is not a conder is not a conder is mited Dome	or policy ree a negliged in a negliged in a negligal in a	elated to trible impacted from the not trip generated to confer itself will	ansportatior on traffic sites). Long erating lict with a
b)	Would the project conflict or be inconsist subdivision (b)?	tent with C	EQA Guid	elines sec	tion 15064.3
	Less than Significant Impact. See the	response t	o item (a)	above.	
c)	Substantially increase hazards due to a or dangerous intersections) or incompati	_	_	, ,	•
	Less than Significant Impact. See the	response t	o item (a)	above.	
d)	Result in inadequate emergency access	?			
	Less than Significant Impact. See the	response t	to item (a)	above.	
	3.4.18 Tribal Cultural Resources				
ca trib se tha the	VIII. TRIBAL CULTURAL RESOURCES: Would the project use a substantial adverse change in the significance of a coal cultural resource, defined in Public Resources Codection 21074 as either a site, feature, place, cultural landscape at is geographically defined in terms of the size and scope of a landscape, sacred place, or object with cultural value to a salifornia Native American tribe, and that is:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Hi	Listed or eligible for listing in the California Register of storical Resources, or in a local register of historical resources defined in Public Resources Code section 5020.1(k), or	,			

pur Re for	A resource determined by the lead agency, in its discretion d supported by substantial evidence, to be significant resuant to criteria set forth in subdivision (c) of Public sources Code Section 5024.1. In applying the criteria set th in subdivision (c) of Public Resource Code Section 5024.1, a lead agency shall consider the significance of the resource a California Native American tribe.				
DIS	SCUSSION				_
a)	Listed or eligible for listing in the Californi local register of historical resources as de 5020.1(k)?	•			
	Less than Significant with Mitigation. S Resources item (a) above. The proposed construction and any land disturbance wo systems.	project w	ill not pron	note additi	onal
b)	A resource determined by the lead agend substantial evidence, to be significant pur of Public Resources Code Section 5024.7 subdivision (c) of Public Resource Code S consider the significance of the resource	suant to clinical in the suant to clinical in apply Section 50	criteria set ring the cri 024.1, the	forth in sul teria set fo lead agend	bdivision (orth in by shall
	Less than Significant with Mitigation. S Resources item (a) above. The Lahontan under AB-52 in October 2018 and receive with the project's implementation.	Water Bo	ard perfor	med tribal	consultation
	3.4.19 Utilities / Service Systems				
XIX	(. UTILITIES AND SERVICE SYSTEMS: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
exp ele cor	Require or result in the relocation or construction of new or banded water, wastewater treatment or storm water drainage, ctric power, natural gas, or telecommunications facilities, the instruction or relocation of which could cause significant vironmental effects?				
and	Have sufficient water supplies available to serve the project d reasonably foreseeable future development during normal, , and multiple dry years?			$\boxtimes$	
pro ade	Result in a determination by the wastewater treatment wider which serves or may serve the project that it has equate capacity to serve the project's projected demand in dition to the provider's existing commitments?				
in e	Generate solid waste in excess of State or local standards, or excess of the capacity of local infrastructure, or otherwise pair the attainment of solid waste attainment goals?			$\boxtimes$	

|--|

## DISCUSSION

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water draining, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. The Limited Domestic Order regulates small facilities. Because of the small footprint of the facilities, it is not expected that relocation, construction, or relocation of any natural gas, electric power, or telecommunication facilities. Dischargers seeking coverage under the Limited Domestic Order may be required to make improvements in treatment, storage, or disposal capacity of their domestic wastewater systems. Those requirements may result in new or expanded wastewater treatment systems being constructed. Any new or expanded facilities are unlikely to significantly affect the environment due to the small size of the wastewater treatment systems and requirements contained in the Limited Domestic Order.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

**Less than Significant Impact.** The Limited Domestic Order will not require new or expanded water supply entitlements. Construction of new or expanding limited domestic systems may require some water supplies to accommodate the construction processes and during startup. However, the Limited Domestic Order will not change the water supply needs or require new or expanded entitlements.

c) 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 Limited Domestic Order's purpose is to treat domestic wastewater on-site. This will reduce any future flows to existing or planned wastewater treatment plants; therefore, wastewater treatment provider capacity will not be affected.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste attainment goals?

**Less than Significant Impact.** Limited domestic systems typically do not generate significant amounts of solid waste to the extent that it would become a landfill capacity issue. The Limited Domestic Order itself will result in less than significant impact to the capacity of landfill facilities.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

**Less than Significant Impact.** The Limited Domestic Order requires dischargers to comply with federal, state, and local statutes and regulations related to solid waste. It also requires a sludge management plan for aerobic treatment units and activated sludge systems and a spill prevention and emergency response plan that describes operation and maintenance activities to prevent accident releases of wastewater, and to effectively respond to such releases, minimizing the environmental impact.

### 3.4.20 Wildfire

<b>XIX. WILDFIRE</b> – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			$\boxtimes$	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?				
c) Require the installation or maintenance of associate infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may result in temporary or ongoing impacts to the environment?				
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slop instability, or drainage changes?				

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

**Less than Significant Impact**. The Limited Domestic Order does not supersede or alter any existing emergency response or evacuation plans.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?

Less than Significant Impact. Due to the small nature of the wastewater systems that will be regulated under the Limited Domestic Order, it is not expected that the approval and implementation of the Limited Domestic Order will highly affect occupancy rates or wildfire risks. The construction and/or operation of the facility will not heighten any risk of wildfire or the spread of wildfire as activities are not expected to propagate fire.

c) Require the installation or maintenance of associate infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may result in temporary or ongoing impacts to the environment?

**Less than Significant Impact**. The Limited Domestic Order will regulate small wastewater facilities that will require minimal additional infrastructure beyond what has already been permitted by the local land use agency. Any construction activities will be subject to associated construction permits both at the local and state level.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less than Significant Impact. Limited domestic systems that can be covered under the Limited Domestic Order typically contain the stormwater that falls on the facility footprint. Because all wastewater is treated prior to land application, and wastewater is contained in treatment systems at the wastewater facility, discharge of polluted runoff is unlikely to occur. The Limited Domestic Order also requires that all pond systems shall have an erosion control program implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface. The Limited Domestic Order prohibits sites from being developed on steep slopes or drainages that would become unstable post fire incidents.

## 3.4.21 Mandatory Findings of Significance

XX. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially 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?				

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

#### DISCUSSION

a) Does the project have the potential to substantially 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 Limited Domestic Order only addresses wastewater discharges to land. Direct or indirect discharges to surface water are prohibited under the Limited Domestic Order. Furthermore, discharges are prohibited from polluting groundwater or surface water, adversely affecting beneficial uses of groundwater, or causing an exceedance of any applicable Basin Plan water quality objective for groundwater or surface water. As a result, surface water quality and aquatic species are unlikely to be affected. The systems are also limited in size which may limit any effect 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. This initial study does not address a project-specific evaluation; however, based on typical limited domestic systems, construction of new, or expansion of existing wastewater systems, are unlikely to result in cumulatively considerable effects on the environment due to the small nature of the projects and the proposed requirements in the Limited Domestic Order. In addition, the Limited Domestic Order is unlikely to change the land development economics and therefore it will not change the number of wastewater treatment systems needed. It is at the discretion of each local land use authority whether to allow the construction of new or expanded facilities in a given area. Local land use authorities also have discretion over more specific siting and design requirements. Therefore, it is speculative to analyze the cumulative impacts associated with constructing new facilities in a given area.

The Limited Domestic Order will only apply to systems with a monthly average flow rate equal to or less than 100,000 gpd. The Lahontan Water Board expects some applicants for this Limited Domestic Order will be long-term dischargers that may be located in areas without existing POTW infrastructure or are planning for POTW services in the future.

State Water Board Resolution No. 68-16, the Statement of Policy with Respect to Maintaining High Quality of Waters in California (hereafter the Antidegradation Policy), requires disposal of waste into the waters of the state be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the state. This is also consistent with language in the Basin Plan. When seeking coverage under this Limited Domestic Order, the Discharger needs to demonstrate the BPTC necessary to maintain the highest water quality consistent with the maximum benefit to the people of the state will be implemented. The efficacy of this BPTC will be tracked using discharge monitoring and reporting.

This Limited Domestic Order also includes discharge monitoring and reporting plan requirements for all treatment systems. These plans demonstrate the continued capability of the treatment system to maintain effluent limits for constituents of concern found in the wastewater.

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 Limited Domestic Order such as impacts to water quality or public health are expected to be less than significant.

Dischargers obtaining coverage under the Limited Domestic Order are subject to the State Water Board policies, the Lahontan Water Board Basin Plan and policies, and local agencies siting criteria.

## PRELIMINARY STAFF DETERMINATION

$\boxtimes$	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).

# **DETERMINATION:**

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.				
	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.				
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.				
	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.				
	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.				
Pren	ared by:				
Signa					
Printed Name: Carly Nilson					
Reviewed by:					
	Signature: Date:				
Printed Name:					
A	and have				
	Approved by: Signature Date:				
	Printed Name:				

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