

Initial Study State Water Resources Control Board Order WQ 20YY-XXXX-DWQ General Waste Discharge Requirements for Winery Process Water DRAFT

# **Initial Study Table of Contents**

| I.   | Introduction6 |  |     |
|------|---------------|--|-----|
| A.   |               | Overview and Regulatory Guidance             | . 6 |
| В.   |               | Lead Agency                                  | . 7 |
| C.   |               | Purpose and Organization                     | . 7 |
| D.   |               | Public Review and Comment                    | . 8 |
| II.  | Regul         | atory Setting and Project Description        | 8   |
| A.   |               | Regulatory Setting                           | 8   |
|      | 1.            | Winery Process Water Constituents of Concern | 9   |
| В.   |               | Background                                   | 11  |
| C.   |               | Project Description                          | 11  |
| III. | Poten         | tial Environmental Impacts                   | .13 |
| A.   |               | Bioregion Environmental Setting              | 13  |
|      | 1.            | Modoc Bioregion                              | .13 |
|      | 2.            | Klamath/North Coast Bioregion                | .15 |
|      | 3.            | Sacramento Valley Bioregion                  | .15 |
|      | 4.            | Bay/Delta Bioregion                          | .15 |
|      | 5.            | Sierra Bioregion                             | .16 |
|      | 6.            | San Joaquin Valley Bioregion                 | .16 |
|      | 7.            | Central Coast Bioregion                      | .16 |
|      | 8.            | Mojave Desert Bioregion                      | .17 |
|      | 9.            | Colorado Desert Bioregion                    | .17 |
|      | 10.           | South Coast Bioregion                        | .17 |
| В.   |               | Hydrology Environmental Setting              | 18  |
|      | 1.            | Precipitation                                | .18 |
|      | 2.            | Runoff                                       | .18 |
|      | 3.            | Water Surplus and Deficit                    | .20 |
| C.   |               | Hydrologic Regions of California             | 20  |
|      | 1.            | North Coast Hydrologic Region                | .22 |
|      | 2.            | San Francisco Bay Hydrologic Region          | .22 |
|      | 3.            | Central Coast Hydrologic Region              | .22 |
|      | 4.            | South Coast Hydrologic Region                | .22 |

|     | 5.         | Central Valley Hydrologic Region                    | .23 |
|-----|------------|---|-----|
|     | 6.         | Sacramento River Hydrologic Subregion               | .23 |
|     | 7.         | San Joaquin River Hydrologic Subregion              | .23 |
|     | 8.         | Tulare Lake Hydrologic Subregion                    | .23 |
|     | 9.         | Lahontan Hydrologic Region                          | .23 |
|     | 10.        | North Lahontan Hydrologic Subregion                 | .23 |
|     | 11.        | South Lahontan Hydrologic Subregion                 | .24 |
|     | 12.        | Colorado River Hydrologic Region                    | .24 |
| D   |            | Environmental Checklist                             | 24  |
|     | 1.         | Aesthetics  | .26 |
|     | 2.         | Agriculture   | .27 |
|     | 3.         | Air Quality   | .30 |
|     | 4.         | Biological Resources                                | .32 |
|     | 5.         | Cultural and Tribal Resources                       | .33 |
|     | 6.         | Geology / Soils                                     | .38 |
|     | 7.         | Greenhouse Gas Emissions                            | .41 |
|     | 8.         | Hazards and Hazardous Materials                     | .43 |
|     | 9.         | Hydrology and Water Quality                         | .45 |
|     | 10.        | Land Use and Planning                               | .48 |
|     | 11.        | Mineral Resources                                   | .49 |
|     | 12.        | Noise   | .50 |
|     | 13.        | Population / Housing                                | .52 |
|     | 14.        | Public Services                                     | .53 |
|     | 15.        | Recreation  | .54 |
|     | 16.        | Transportation / Traffic                            | .54 |
|     | 17.        | Utilities and Service Systems                       | .56 |
|     | 18.        | Mandatory Findings of Significance                  | .58 |
|     | 19.        | Preliminary Staff Determination                     | .61 |
|     | 20.        | Environmental Factors Potentially Affected          | .61 |
| IV. | Sumn       | nary of Significant Impacts and Mitigation Measures | .62 |
| V.  | Deter      | mination  | .63 |
| VI. | References |   |     |
|     |            |   |     |

# Table of Figures

| Figure 1 Regional Water Quality Control Boards and County Boundaries | 10 |
|--|----|
| Figure 2 California Bioregions                                       | 14 |
| Figure 3 Annual Precipitation Rates in California (CDF 2011)         | 19 |
| Figure 4 Hydrologic Regions and Groundwater in California (DWR 2003) | 21 |

### Acronyms and Abbreviations

| Acronym or Abbreviation | Meaning   |
|-------------------------|---|
| Basin Plan              | Water Quality Control Plan                                      |
| BOD                     | biochemical oxygen demand                                       |
| Cal. Code Regs. or CCR  | California Code of Regulations                                  |
| CBI                     | Commercial, Business, or Industrial                             |
| CDF                     | California Department of Forestry and Fire Prevention           |
| CEQA                    | California Environmental Quality Act                            |
| CERES                   | California Environmental Resources Evaluation System            |
| Clean Water Act         | Water Pollution Control Act of 1972                             |
| Delta                   | Sacramento-San Joaquin River Delta                              |
| DWR                     | California Department of Water Resources                        |
| EIR                     | Environmental Impact Report                                     |
| ESA                     | Endangered Species Act of 1973                                  |
| General Order           | General Waste Discharge Requirements                            |
| GHG                     | Greenhouse Gas  |
| LAA                     | Land application area   |
| Porter-Cologne Act      | Porter-Cologne Water Quality Control Act of 1969                |
| regional water board    | Regional Water Quality Control Board                            |
| §                       | Section   |
| State Water Board       | State Water Resources Control Board                             |
| TDS                     | total dissolved solids  |
| USFWS                   | United States Fish and Wildlife Service                         |
| USGS                    | U.S. Geological Survey  |
| WDR                     | Waste Discharge Requirement                                     |
| Winery                  | Winery Facility, Grape Juice Storage Facility, Wine Distillery, |
| -                       | or Winery/Wine Distillery Process Water and Solids              |
|                         | Treatment and Disposal System                                   |

### I. Introduction

### A. Overview and Regulatory Guidance

The State Water Resources Control Board (State Water Board) has prepared this Initial Study pursuant to the California Environmental Quality Act (CEQA). This Initial Study evaluates the effects of adopting and implementing a General Waste Discharge Requirements Order (General Order) for land application of treated winery process water and solids. This Initial Study was prepared to address environmental factors related to such discharges. Wineries, grape juice storage facilities, and wine or grape juice processing facilities (hereafter simply referred to as wineries) that discharge winery process water and solids to land will be eligible for coverage under the General Order.

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 water quality control plans (Basin Plans), and other applicable policies of the State Water Board and regional water boards.General waste discharge requirements can be adopted by the State Water Board or the regional water board for a category of discharges if determined that the discharges involve similar operations, types of waste, treatment standards, and the discharges are more appropriately regulated under general waste discharge requirements than individual.

This Initial Study is prepared to address CEQA requirements for the discretionary action of adopting and implementing a General Order and the resulting potential for reasonably foreseeable effects on the environment that wineries and winery process water and solids treatment and disposal systems may have when operated to comply with the General Order. The regional water boards have discretion whether to use the General Order or individual WDRs for regulatory coverage. Furthermore, local land use authorities have discretion over approval, siting, and design of new and expanding wineries.

The State Water Board estimates 2,070 bonded wineries may be subject to the order, increasing permit coverage from about 15% to nearly 60% of eligible wineries. The State Water Board cannot speculate the impact, location, design, or number of newly constructed or expanding wineries that may be enrolled as a result of this General Order pursuant to California Code of Regulations, title 14, section 15064 (d).

This Initial Study was prepared based upon typical winery treatment and disposal operations, for process water and solids. The State Water Board cannot evaluate site-specific environmental factors at this time because the General Order does not address a specific winery or specific winery process water and solids treatment and disposal system. Any new or expanding wineries and winery process water and solids treatment and disposal systems will be required to comply with CEQA and local agency requirements, which include a project level CEQA review of site-specific impacts as part of the discretionary action associated with review/approval of the specific proposal.

Adoption and implementation of the General Order for new and existing wineries is categorically exempt from CEQA under California Code of Regulations, title 14 section 15308

(actions by regulatory agencies for protection of the environment). Additionally, the adoption and implementation of the General Order as applied to existing wineries is categorically exempt from CEQA under California Code of Regulations, title 14, section 15301 (ongoing or existing projects).

Section 15300.2 provides exceptions to these categorical exemptions based on location, cumulative impact, significant effects due to unusual circumstances, scenic highways, hazardous waste sites, and historical resources. There is no evidence that any of these exceptions apply. However, in the event this evidence is found to exist, this Initial Study is being prepared pursuant to the CEQA Guidelines (Cal. Code Regs., title 14, section 15063) to consider whether adoption and implementation of the General Order could have a significant effect on the environment.

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.

# B. Lead Agency

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

# C. Purpose and Organization

The purpose of this Initial Study is to evaluate the foreseeable potential for environmental effects that may occur as a result of adopting the General Order. The objective of the General Order is to streamline implementation of water quality regulations and the permitting process for winery process water and solids discharges to land.

The document is organized as follows:

- Chapter 1, "Introduction," describes the purpose and organization of this document.
- Chapter 2, "Regulatory Setting and Project Description," provides background information about the regulatory setting, environmental factors of concern, and provides a description of the proposed project.
- Chapter 3, "Potential Environmental Impacts," uses the environmental factors provided in the CEQA Guidelines' Environmental Checklist (Appendix G Environmental Checklist Form, Revised 2016) to evaluate a range of potential impacts.

As a discretionary action, issuance of the General Order fits the CEQA definition of a project. (Pub. Resources Code, § 21065 (c)). The State Water Board, as the project's lead agency, consulted with state responsible and trustee agencies before determining if a project's impacts are significant

(Pub. Resources Code, § 21080.3; Cal. Code Regs., tit. 14, § 15063) and prior to selecting the type of CEQA document to prepare. The list of agencies consulted was developed with assistance from the California Office of Planning and Research. A draft Initial Study was transmitted on **July 3**, **2020** to all identified agencies.

# D. 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.

Prior to transmitting the draft Initial Study for public comment, the State Water Board notified Native American Tribes of the opportunity to consult, identify, and address potential adverse impacts to tribal resources of cultural, historical, and/or archaeological significance (Tribal Cultural Resources). The Public Resources Code establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." (Pub. Resources Code, § 21084.2.) The State Water Board transmitted the consultation offer on November 8, 2019. The Buena Vista Rancheria of Mi-Wuk Indian Tribe, Rincon Band of Luiseño Indian Tribe, and Wilton Rancheria Tribe submitted requests for consultation. Mitigation measures were recommended by the Wilton Rancheria tribe. Comments and concerns were considered during consultation with the tribes on June 5, 2020.

If you have any questions about document availability or the public review and comment process, please contact Stephanie Torres at (916) 341-5572 or <a href="mailto:stephanie.torres@waterboards.ca.gov">stephanie.torres@waterboards.ca.gov</a>

# II. Regulatory Setting and Project Description

# A. Regulatory Setting

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

California has nine regional water boards (Figure 1) that work independently of each other but in cooperation with the environmental and public health agencies of the counties and cities.

Statutes regulating waste discharge requirements (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:
- 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.

- 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.
- 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 from initiating a 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.

## 1. Winery Process Water Constituents of Concern

The primary concerns associated with waste discharges to land from wineries are: (1) degradation of water quality; and (2) odors from overloaded or upset treatment or disposal system components. Summaries of typical winery discharge constituents of concern and potential deleterious effects are stated below.

**Biochemical Oxygen Demand (BOD)**: A measurement of the concentration of biodegradable organic content in process water. The value represents the amount of oxygen required by microorganisms while oxidizing the waste constituents under aerobic conditions. Excessive BOD can create malodorous conditions and can mobilize soil constituents.

**Nitrogen**: Nitrogen in winery process water may originate from residual juice or wine collected during sanitation activities, chemicals used for sanitation purposes such as quaternary ammonium, or source water. Excessive application of nitrogen to land over time can result in nitrate groundwater degradation and may affect water quality of drinking water sources relied upon by communities.

**Salinity**: A measurement of fixed dissolved solids in winery process water. The majority of salinity in winery process water originates in sanitation chemicals used in cleaning activities. Excessive salinity can affect the beneficial uses of water.



Figure 1 Regional Water Quality Control Boards and County Boundaries

## B. Background

The State Water Board will consider adoption of a General Order that authorizes winery process water and solids to be discharged to land. Winery process water may be discharged to subsurface disposal areas, process water ponds, or applied to land application areas. Some waste streams may be hauled from the facilities to wastewater treatment systems and high strength or brine waste streams are required to be segregated from the process water discharges to land and disposed of properly. Solids may be applied to land application areas as a soil amendment. Winery process water and solids discharges are currently regulated by site-specific WDRs, general WDRs, or conditional waivers of WDRs issued by the regional water boards.

## **C. Project Description**

The State Water Board will consider adoption and implementation of a General Order (collectively, the Project) to streamline permitting and improve consistency in regulating winery process water and solids discharges to land throughout the state. Although the State Water Board intends for the General Order to be the primary permitting mechanism, based on site-specific conditions, regional water boards have discretion whether to enroll dischargers in the General Order or site-specific WDRs.

Winery process water treatment systems may include collection sumps, settling tanks, wastewater ponds, activated sludge systems, subsurface disposal systems, and/or land application areas. The wineries covered by the General Order may discharge winery process water and/or solids to land only; discharge to surface water bodies is prohibited.

The General Order provides loading and effluent limits for various winery process water constituents. Dischargers with ample land may rely on natural treatment processes that occur in land application areas and are not required to provide extensive pretreatment. Dischargers with limited land application acreage must provide a higher level of treatment prior to discharge. In some cases, discharge to a treatment/disposal pond is adequately protective of water quality (but must be evaluated to demonstrate that it is protective).

The footprint of a winery process water treatment system will vary with the size of the winery and disposal method. The smallest wineries may employ a settling tank and subsurface disposal system. Percolation or stabilization ponds and land application of process water and/or solids is generally employed at larger wineries with higher wastewater flow rates. The level and type of treatment at a winery is highly variable. Wineries may employ any or all of the treatment methods. The types of winery process water treatment and dispersal systems typically employed for treatment of winery process water can be generally described as follows:

- **Collection/Screening Sumps** provide a low level of treatment. The collected winery process water may be applied to land if adequate acreage exists or discharged to any of the treatment systems described below. Collection sumps occupy a relatively small area. Pumps generally generate low levels of noise limited to the immediate area. Odors typically are not an issue with collection sumps because they are generally operated frequently enough that winery process water does not reside in the sump long enough to generate nuisance odors.
- Settling tanks and associated dispersal provide primary clarification and limited biological

treatment. In many cases, tank effluent that has met constituent levels (e.g., nitrogen, BOD, salinity) established by this General Order will be discharged to a subsurface disposal area or may be land applied. In others, effluent may be hauled off-site for disposal at a wastewater treatment facility. Settling tanks occupy a small area and only the access ports are visible at the ground surface. Frequently, tank effluent is discharged to a subsurface disposal area covered with grass or similar shallow rooted vegetation. Some tanks may be equipped with a dosing pump, which generates a negligible amount of noise. Pumping of a settling tank may occur every one to five years and is dependent on the quality of winery process water, screening that occurs upstream of the tank, and tank size.

- **Pond treatment systems** provide biological treatment and flow stabilization. They may provide treatment, storage, and/or disposal functions. Winery process water stored in ponds may be used to irrigate a land application area. Ponds 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 winery. Ponds can be subject to upset due to excessive biochemical oxygen demand (BOD) loadings or seasonal odor generation if thermally stratified ponds mix. Well-operated systems typically do not generate objectionable odors.
- Activated sludge treatment systems provide biological stabilization, can produce highly
  treated winery process water and provide biological nitrogen reduction. Activated sludge
  systems occupy relatively small footprints. Pumps and mechanical aerators generate low levels
  of noise, but activated sludge systems are typically small enough that they can be contained in
  a garage sized building or below ground if needed. Activated sludge systems must employ a
  clarifier or membrane treatment and dispose of excess sludge. Activated sludge systems can
  be subject to upset due to excessive BOD loadings. Well-operated systems typically do not
  generate objectionable odors.
- Fixed film biological treatment systems provide biological stabilization and can produce moderately well treated winery process water or be used to pretreat winery process water constituents prior to discharge (e.g., reduce BOD concentrations prior to discharge to a land application area). Fixed film systems can include recirculating sand (or other media) filters used in association with a settling tank, trickling filters, etc. Fixed film systems generally occupy a relatively small footprint and can be contained within a building or below ground if needed.
- Land application areas are used to dispose of winery process water and solids, but also
  provide treatment of winery process water. If adequate acreage is available to allow land
  application of winery process water at rates that will not create nuisance conditions, land
  application may provide the only treatment needed (with adequate upstream screening of
  solids). Solids generated in the winery may be applied with or without composting and are
  normally a valuable soil amendment that improves soil tilth. Land application areas are
  generally used to grow crops, which take up winery process water constituents such as nitrogen
  and maintain roots that promote winery process water infiltration. Winery process water and
  solids can be managed when applied to a land application area to prevent odors and optimize
  winery process water treatment through soil infiltration.

Compliance with the General Order is documented by self-monitoring reports submitted to the regional water board. This includes regularly reporting the results of observations and analytical data related to compliance. In addition, technical reports are required to determine the effectiveness of the winery process water and solids treatment and disposal system for activities considered to be higher threats to water quality. For example, use of a subsurface disposal area or a process water pond triggers evaluation of the potential impact on groundwater quality. In addition, significant loading of process water to land application areas triggers groundwater monitoring requirements for the land application areas.

## III. Potential Environmental Impacts

## A. Bioregion Environmental Setting

California is divided geographically into bioregions, classified by relatively large areas of land or water, which contain characteristically and 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, coastal areas, to alpine areas of 14,000 feet or more in elevation. The diversity of geography colliding with temperature and moisture leads to a significant diversity of biological resources. California has the highest total number of species and the highest number of endemic species within its borders than any other state. California also has the highest number of rare species (species typically listed under the federal Endangered Species Act [ESA] or the California ESA), and about one-third of those species are at risk, meaning these species have the potential for local or global extinction.

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

### 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 (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.



Figure 2 California Bioregions

## 2. Klamath/North Coast Bioregion

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

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

### 3. Sacramento Valley Bioregion

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

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

## 4. Bay/Delta Bioregion

The Bay/Delta Bioregion extends from the Pacific Ocean to the Sacramento Valley and San Joaquin Valley Bioregions to the northeast and southeast, and a short stretch of the eastern boundary joins the Sierra Bioregion at Amador and Calaveras Counties. The bioregion is bounded by the Klamath/North Coast Bioregion on the north and the Central Coast Bioregion to the south (CERES 2005). The marine and ocean areas are categorized as the Oceanic Bioregion and the northern portion of the Central Ocean Bioregion. These bioregions include two-thirds of California's coast, extending down to Point Conception north of Santa Barbara. Though of moderate size, the Bay/Delta Bioregion is the second most populous bioregion, encompassing the San Francisco Bay Area and the Sacramento-San Joaquin Delta.

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

## 5. Sierra Bioregion

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

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

### 6. San Joaquin Valley Bioregion

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

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

### 7. Central Coast Bioregion

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

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

## 8. Mojave Desert Bioregion

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

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

### 9. Colorado Desert Bioregion

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

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

## 10. South Coast Bioregion

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

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

# B. 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). This section provides a brief overview of the key hydrological elements for California since the ultimate determinants of the availability of surface and groundwater resource within the individual regional water boards is the climatic pattern.

# 1. Precipitation

There is relatively abundant precipitation in the state, but the majority of the precipitation is concentrated in areas remote from most large urban centers and major agricultural areas. Much of the climatic variation in the state results from the patterns of global weather systems, oceanic influences, and the location and orientation of the mountains. As shown in Figure 3, northern California is much wetter than southern California, with more than 70 percent of the average annual precipitation and runoff occurring in the northern part of the state. On average, about 75 percent of the annual precipitation in the state falls between November and March; with about 50 percent occurring between December and February. However, amounts of precipitation vary greatly from year to year, which can often make the services of surface water supplies undependable. The extreme northern part of California has slightly wetter summers than the rest of the state. Fog also occurs frequently on the coast and provides some additional moisture that is used primarily by vegetation.

# 2. Runoff

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

<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: <u>California Interagency Watershed Map of 1999</u>.<http: pubs.usgs.gov/ha/ha730/ch\_b/index.html>; CalWater. 1999.</html>



Figure 3 Annual Precipitation Rates in California (CDF 2011)

## 3. Water Surplus and Deficit

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

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

## C. Hydrologic Regions of California<sup>2</sup>

Hydrologists divide California into hydrologic regions (Figure 4). The regional water boards are primarily<sup>3</sup> defined 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>&</sup>lt;sup>2</sup> Hydrologic region descriptions were adapted from: California's Groundwater, Bulletin 118, DWR 2003 and the regional water board Basin Plans

<sup>&</sup>lt;sup>3</sup> The South Coast Hydrologic Region is divided among three regional water boards (Los Angeles, Santa Ana, and San Diego) because it is the most populous area of the state.



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

## 1. North Coast Hydrologic Region

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

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

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

# 2. San Francisco Bay Hydrologic Region

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

## 3. Central Coast Hydrologic Region

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

## 4. South Coast Hydrologic Region

The South Coast Hydrologic Region is divided among the Los Angeles, Riverside, and San Diego Regional Water Boards and is the most populous area of the state. Groundwater supplies approximately 23 percent of the region's water in normal years and about 29 percent in drought years. Like the Central Coast Hydrologic Region, the majority of aquifers in this region are coastal

basin aquifers. In the eastern central portion of the region, there lies a small section of basin-fill aquifer and the remainder of the region comprises fractured hard rock zones.

# 5. Central Valley Hydrologic Region

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

## 6. Sacramento River Hydrologic Subregion

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

## 7. San Joaquin River Hydrologic Subregion

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

## 8. Tulare Lake Hydrologic Subregion

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

## 9. Lahontan Hydrologic Region

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

## 10. North Lahontan Hydrologic Subregion

The North Lahontan Hydrologic Subregion consists of the western edge of the Great Basin, and water in the region drains eastward toward Nevada. Groundwater in the northern half of this subregion is primarily contained in basin-fill and volcanic rock aquifers, with some fractured hard rock zones. The southern half of this region is dominated by fractured hard rock zones, but small segments of basin-fill aquifers also exist in this part of the subregion. In general, the water quality in the North Lahontan Hydrologic Subregion is good. In basins in the northern portion of the region, groundwater quality is widely variable. The groundwater quality along these basin margins tends to be of higher quality, but the potential for future groundwater pollution exists in urban and suburban

areas where single-family, domestic septic systems have been installed, especially in hard rock areas. Groundwater quality ranges from good to excellent in the alpine basins.

# 11. South Lahontan Hydrologic Subregion

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

The South Lahontan Hydrologic Subregion contains numerous basin-fill aquifers, separated by fractured hard rock zones. Although the quantity of surface water is limited in the South Lahontan Hydrologic Subregion, the quality is very good, being greatly influenced by snowmelt from the eastern Sierra Nevada. However, at lower elevations, groundwater and surface water quality can be degraded, both naturally from geothermal activity, and as a result of human-induced activities. Drinking water standards are most often exceeded for total dissolved solids (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.

## 12. Colorado River Hydrologic Region

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

# D. Environmental Checklist

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

Discharge of process water and solids from wineries can create environmental risks to groundwater quality. The General Order contains requirements that reduce the potential risks to "less than significant impact" or "no impact" levels. However, the potential environmental impacts of projects regulated under the General Order are foreseeable only to a limited extent. Additional environmental review will be performed by local agencies for new or expanding wineries.

Wineries are constructed as a result of factors unrelated to the adoption and implementation of the General Order. The effect of the State Water Board's discretionary action adopting the General Order is that permitting will occur under the General Order instead of under individual WDRs. To the extent a project is not consistent with the General Order, or additional requirements are determined to be necessary, the regional water boards can require and prepare individual WDRs.

| Project Component  | Description  |
|--|--|
| Project Title:   | General Waste Discharge Requirements for<br>Winery Process Water   |
| Lead agency name and address:  | State Water Resources Control Board Division<br>of Water Quality<br>P.O. Box 100<br>Sacramento, CA 95812 |
| Contact person and phone number:   | Stephanie Torres<br>WDR Permitting Unit<br>(916) 341-5572  |
| Project Location:  | Statewide  |
| Project sponsor's name and address:  | State Water Resources Control Board<br>Division of Water Quality<br>P.O. Box 100<br>Sacramento, CA 95812 |
| General plan description:  | Not Applicable   |
| Zoning:  | Not Applicable   |
| Description of project:  | See section II.C, Project Description  |
| Surrounding land uses and setting; briefly describe the project's surroundings:                                    | Statewide  |
| Other public agencies whose approval is required (e.g., permits, financial approval, or participation agreements): | None   |

### 1. Aesthetics

Aesthetics Environmental Factor.Would the project have:

- 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 within a state scenic highway?
- c) Substantially degrade the existing visual character or quality of the site and its surroundings?
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-d above
- No Impact: None

### DISCUSSION

Have a substantial adverse effect on a scenic vista? Less than Significant Impact. New a) or expanding wineries could be constructed in a variety of settings in many areas of California, including scenic areas Depending on the winery facility and treatment system, components, footprint, and construction activities, the potential impact will vary greatly. Wineries tend to be visited by the public, and therefore, are constructed to incorporate architectural design elements that are aesthetically pleasing. The smallest winery process water treatments and disposal systems are tanks used in part for primary clarification, which are typically located underground. If an aerobic treatment unit is used, a low profile, above ground box may be used to enclose pump controls, air blower, pump, and miscellaneous valves. Any above ground components have a low profile and winery process water 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. Winery process water pond systems and land application areas (LAAs) require a larger footprint. As a result, pond systems are located farther from developed areas where real estate is less expensive. Property values are generally higher if the property includes a scenic vista; this makes pond systems less likely to be constructed impacting any existing scenic vista. LAAs are cropped areas where the crop is often grape vineyards. Vineyards are not typically considered to be aesthetically objectionable. Local authority review will be conducted for new and expanding wineries seeking coverage under this General Order and the issue of scenic vistas will be evaluated on a site-specific basis. Local authority siting criteria for new, modified, or existing wineries will continue and establish appropriate locations on a site-specific basis. The General

Order will not affect local agency ordinances in place to establish standards for construction within scenic areas. Site-specific mitigation would be developed if needed to address any identified site-specific issues. The General Order will have a less than significant impact on a scenic vista.

- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? Less than Significant Impact. See the response to item (a) above.
- c) Substantially degrade the existing visual character or quality of the site and its surroundings? **Less than Significant Impact.** See the response to item (a) above.
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? **Less then Significant Impact.** Some wineries operate at night and some of the work may require outdoor lighting at night. Some wineries hold special public or private events such as wine tasting, weddings, and concerts that require outdoor lighting at night. The issuance of permits for those activities is the responsibility of local agencies that issue land use permits and the General Order will not affect those local agency ordinances.

## 2. Agriculture

Agriculture and Forest Environmental Factor. 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment

Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- 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).)?
- d) Result in the loss of forest land or conversion of forest land to non-forest use?
- 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?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-e above
- No Impact: None

## DISCUSSION

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance a) (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. Because wineries depend on agricultural commodities (grapes) wineries are more likely to preserve farmland rather than convert it to another use. Construction of new or expanding wineries could occur on a wide variety of soil types throughout the state, including areas that could be categorized under the California Department of Conservation Farmland Mapping and Monitoring Program as Farmland of Statewide Importance, Prime, or Unique Farmland. Because site-specific projects have not been determined, this evaluation does not address site-specific impacts. The potential for converting farmland is impossible to determine. The General Order does not change zoning or land use designation and will not alter the economics of farmland conversion to other uses. Prior to conversion of farmland to other uses, entitlements would be required by local land use authorities, and a project specific CEQA evaluation would be performed which would address any new or expanding wineries seeking coverage under the General Order. The issue of farmland conversion will be evaluated on a site-specific basis as these projects are identified. The potential impacts of the General Order on such farmland are considered less than significant.
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? Less than Significant Impact. The adoption and implementation of the General Order will not affect zoning designations, or a Williamson Act contract established by local land use jurisdictions. The General Order does not affect zoning or Williamson Act contracts although construction of wineries could occur within land zoned for agriculture and land with existing 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 the impacts.
- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Pub. Resources Code, § 12220(g)), timberland (as defined by Pub. Resources Code, § 4526), or timberland zoned Timberland Production (as defined by Gov. Code, § 51104(g))?
   Less than Significant Impact. The adoption and implementation of the General Order will not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Any conflicts with or conversion of existing zoning would require site-specific project approvals by local land use authorities. See the responses 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.

Construction of new or expanding wineries could occur on a wide variety of soil types throughout the state, including forest land. Adopting the General Order does not change zoning or land use designation and will not alter the economics of forest land conversion to

other uses. Prior to conversion of forest land to other uses, entitlements would be required by local land use authorities, and a project-specific CEQA evaluation would be performed, which would include any new or expanding wineries seeking coverage under the General Order. The issue of loss or conversion of forest land will be evaluated on a site-specific basis as these projects are identified. The potential impacts of the General Order on such forest land are considered less than significant.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? **Less than Significant Impact.** See the responses to item (a) and (d) above.

### 3. Air Quality

Air Quality Environmental Factor. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

- a) Conflict with or obstruct implementation of the applicable air quality plan?
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- d) Expose sensitive receptors to substantial pollutant concentrations?
- e) Create objectionable odors affecting a substantial number of people?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-e above
- No Impact: None

# DISCUSSION

 a) Conflict with 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 winery 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 for winery process water treatment and disposal 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 guality 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. Dust or windblown materials are not primarily generated in the winery process areas and are primarily generated in the vineyard areas where the growing practices are not managed or regulated by the General Order. Wineries are required to meet local agency ordinances and regulations for any air guality impacts and the General Order would not affect those local agency ordinances. General air quality impacts cannot be accurately determined because the General Order does not address (or approve) any specific winery equipment, operations, projects, or construction-related activities. As specific systems are identified, site-specific environmental review will be conducted which will consider any additional air quality impacts not addressed in this document. The General Order would result in less than significant impacts to implementation of an applicable air quality plan.

- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? **Less than Significant Impact**. See the response to item (a) above.
- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

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

- d) Expose sensitive receptors to substantial pollutant concentrations? Less than Significant Impact. See the response to item (a) above.
- e) Create objectionable odors affecting a substantial number of people? Less than Significant Impact. Management of winery process water and solids from wineries regulated under the General Order could create objectionable odors; the wastes are typically high in biodegradable organic matter and enough water is typically present to allow aerobic biological treatment (when sufficient oxygen is present) and anaerobic treatment (when oxygen concentrations are limited). Though both aerobic and anaerobic treatment can generate odors, most people find the odor associated with the anaerobic process to be more offensive. The use of best practicable treatment or control measures is

State Water Resources Control Board Order WQ 202Y-XXXX-DWQ **Page** 31

> effective in preventing the generation of nuisance odors. The General Order requires implementation of best practicable treatment or control measures and includes prohibitions and discharge specifications that address controlling odors. The General Order also requires monitoring and reporting of nuisance odor conditions as part of the monitoring and reporting program.

#### 4. Biological Resources

Biological Resources Environmental Factor. Would the project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (USFWS)?
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- c) Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- 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?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-f above
- No Impact: None

### 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. Impacts will be evaluated on a

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

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? Less than Significant Impact. See the response to item (a) above.
- c) Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
   Less than Significant Impact. Because the discharge is limited to land, projects are unlikely to impact federally protected wetlands. In addition, see the response to item (a) above.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? Less than Significant Impact. See the response to item (a) above.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
   Less than Significant Impact. A project-specific evaluation will be prepared for a new or expanding winery. The General Order does not address, preempt, or supersede the authority of local policies or ordinances protecting biological resources. Therefore, conflicts with such plans, policies or ordinances are unlikely to occur.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?
   Less than Significant Impact. See the response to items (a), (c), and (e) above.

### 5. Cultural and Tribal Resources

Cultural and Tribal Resources Environmental Factor. Would the project cause a substantial adverse change in the significance of a cultural or tribal cultural resource. Tribal Cultural Resource (TCR) is defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe. This

may include, but not limited to, sites of historical, cultural, tribal, or related resource significance. Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA section15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA section15064.5?
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
- d) Disturb any human remains, including those interred outside of formal cemeteries?
- e) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- f) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: a-f
- Less Than Significant Impact: None
- No Impact: None

## DISCUSSION

- a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA section 15064.5? Less than Significant Impact with Mitigation Incorporated. Adoption and implementation of the General Order may result in projects implemented in areas with historical resource significance as defined in CEQA section 15064.5. The locations of new wineries would be unknown at the time the General Order is adopted, so it is not possible to determine whether impacts to historical resources would occur. In addition, because existing wineries have been previously constructed, unknown cultural resources are less likely to exist. As appropriate, expanding and new wineries will be subject to a project-specific CEQA analysis that should provide mitigation addressing the significant, indirect or direct adverse effects on tribal cultural resources which may inadvertently be discovered during ground disturbing activities. Mitigation is as follows:
  - i. California Historical Resources Information System (CHRIS), Sacred Lands Inventory, and other cultural resources surveys. For a new or expanding winery engaging in any

significant ground disturbing winery activities (e.g., new deep ripping, trenching, excavation, road construction, or pond construction

a) The Discharger shall perform, prior to these activities, a Native American archaeological resources records search at the appropriate regional information center of the CHRIS. CHRIS results shall be documented. The requirement to perform a CHRIS records search may be satisfied by using the results of a previous CHRIS records search completed for the specific parcel or parcels where the new or expanding winery activities are proposed to occur. Following a positive CHRIS result, the Discharger must 1) report any identified Native American archaeological sites or artifacts to the culturally affiliated California Native American tribe(s) and 2) notify the regional water board Executive Officer of the positive result.

b) The Discharger shall request a Sacred Land Inventory for the project area from the Native American Heritage Commission as part of conducting a physical cultural resources survey for the property/area where a prior physical cultural resources survey has bot been conducted. The Discharger shall also 1) contact the local tribes about the project to inquire about TCRs in the project area, 2) conduct a survey of the property, 3) record potential historical and archaeological resources, and 4) write a report of findings to be submitted to the appropriate regional information center of the CHRIS and the regional water board.

c) Using previously completed survey reports or record search results, the Discharger can demonstrate CEQA compliance for the surveyed portion of the property by using previously completed survey reports or record search results that identified no TCRs for that portion of the property/parcel.

ii. *Consultation*. The Discharger and/or the regional water board shall develop appropriate mitigation and conservation measures in consultation with the affected California Native American tribe when the survey and research reveal a TCR or a Sacred Lands inventory positive result. The Discharger shall:

a) Provide the proposed final conservation measures to the California Native American tribes that are potentially culturally affiliated (affected tribes) for a 30-day comment period;

b) Demonstrate the goal of conserving TCRs with appropriate dignity by careful consideration of any comments or mitigation measure recommendations submitted by the affected tribe(s) within this 30-day comment period;

c) Implement the proposed final conservation measures if no comments are received from the affected tribe(s) or comments from the affected tribe(s) have been addressed through mitigation measures such as avoidance of the area, fencing, soil-capping, onsite-burial, or other equally protective measures;

d) Provide a copy of the final mitigation and conservation measures to any affected tribe(s) identified by the Native American Heritage Commission and to the regional water board Executive Officer. Final mitigation measures are subject to approval by the regional water board Executive Officer.

iii. *Treatment of Human Remains*. The Dischargers shall immediately comply with Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section

5097.98 upon discovery of any human remains. The Discharger shall take the following actions upon the discovery of human remains:

a) Immediately cease all ground-disturbing activities in the vicinity of the discovery;

b) Immediately notify the county coroner;

c) Discontinue ground-disturbing activities until the requirements of Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98 have been met; and

d) Ensure that the human remains are treated with appropriate dignity. The coroner has (1) two working days to examine human remains after being notified by the person responsible for the excavation, or by their authorized representative per Health and Safety Code section 7050.5, and (2) 24 hours to notify the Native American Heritage Commission for Native American remains. The Native American Heritage Commission will immediately notify the persons it believes to be the most likely descended from the deceased Native American per Public Resources Code section 5097.98. The most likely descendant has 48 hours, from the time they are granted access, to make recommendations to the landowner or representative for the treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods.

The landowner or their authorized representative shall reinter the human remains and items associated with the Native American human remains with appropriate dignity on the property in a location not subject to further and future disturbance consistent with subdivision (e) of Public Resources Code section 5097.98 if the:

a) Native American Heritage Commission is unable to identify a descendent;

b) Mediation provided for pursuant to subdivision (k) of Public Resources Code section 5097.94, if invoked, fails to provide measures acceptable to the landowner;

c) Most likely descendant does not make recommendations within 48 hours;

d) Most likely descendants and the landowner have not mutually agreed to extend discussions regarding treatment and disposition pursuant to subdivision (b)(2) of Public Resources Code section 5097.98; and/or,

e) Landowner does not accept the descendant's recommendations. The landowner or the descendants may request mediation by the Native American Heritage Commission pursuant to Public Resources Code section 5097.94, subdivision (k).

iv. Procedures for Discovery During Ground Disturbing Activities. The Discharger shall:
a) Immediately cease significant ground disturbing winery activities regulated under this General Order within 50 feet (100-foot diameter circle) of any uncovered or discovered indicators of a TCR, suspected archaeological materials, or discovery of a TCR.
b) Notify the Native American Heritage Commission within seven days of the discovery and request a list of any California Native American tribes that are potentially culturally affiliated with the discovery (affected tribes);

c) Develop any necessary mitigation measure proposals, which may include those listed in Mitigation Measures to protect TCR Sites on Wineries (Section iii § v).

d) Submit the proposed final mitigation measures to the potentially affected tribe(s) for a 30-day comment period;

e) Demonstrate the goal of conserving TCRs with appropriate dignity by careful consideration of any comments or mitigation measure recommendations submitted by

the potentially affected tribe(s) within this 30-day comment period;

f) Implement the proposed final conservation measures if no comments are received from the affected tribe(s) or comments from the affected tribes have been addressed through mitigation measures such as avoidance of the area, fencing, soil-capping, onsite burial, or other equally protective measures (Section iii § v) and,

g) Provide a copy of the final mitigation and conservation measures to any culturally affiliated California Native American tribes identified by the Native American Heritage Commission and to the regional water board Executive Officer.

The final mitigation measures are subject to approval by the regional water board Executive Officer. The regional water board Executive Officer shall require mitigation measures (e.g., from the list in Section 4 below) when the affected tribe(s) and the Discharger cannot reach an agreement. Winery activities can resume within the approval.

- v. Mitigation Measures to Minimize and Avoid Significant Adverse Impacts to TCR Sites on Wineries. The following are examples of mitigation measures that, if feasible for a given site, may be used to minimize and avoid significant adverse impacts to TCR sites:
   a) Avoidance of the site;
  - b) Confidentiality of the site location;

c) Fence off or cap-in-place areas of very high sensitivity such as burial and cemetery sites;

d) Use above ground irrigation lines or route irrigation lines around TCR sites;

e) Avoid irrigation or waste discharge over TCR sites;

f) Provide worker training about potential TCR resources in the area;

g) Protect the cultural character and integrity of the resource, and;

h) Other effective mitigation measures that reduce impacts to TCR sites to a less than significant level.

Note: Not all mitigation measures will apply to individual wineries. Appropriate selection of the mitigation measures above as tailored to a project's individual impacts will reduce impacts to a less than significant level.

- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA section 15064.5? Less than Significant Impact with Mitigation Incorporated. See the response to item (a) above.
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? Less than Significant Impact with Mitigation Incorporated. See the response to item (a) above.
- d) Disturb any human remains, including those interred outside of formal cemeteries? Less than Significant Impact with Mitigation Incorporated. See the response to item (a) above, especially §iii.
- e) Would the project cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? Less than Significant Impact with Mitigation Incorporated. See the response to item (a) above.
- f) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. Less than Significant Impact with Mitigation Incorporated. See the response to item (a) above.

### 6. Geology / Soils

Geology and Soils Environmental Factor. Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to division of Mines and Geology Special Publication 42.
  - 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?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-e
- No Impact: None

## DISCUSSION

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving listed risks below:
  - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. Less than Significant Impact. Adoption and implementation of the General Order will not have a substantial adverse effect caused by geologic or soil conditions. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the issue of geologic or soils hazards will be evaluated on a site-specific basis at that time. In addition, the siting criteria of the local agencies will establish appropriate locations and seek to avoid or minimize, on a site-specific basis, any potential for risk to people or structures 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.
- Result in substantial soil erosion or the loss of topsoil? Less than Significant Impact. b) Some wineries permitted under the General Order are likely to apply winery process water to an LAA. Some of those facilities may allow stormwater to run off the LAA; however, winery process water will not be applied at that time, reducing the amount of water available to erode soil. In addition, erosion is unlikely to occur due to the limited areal extent of an LAA, precipitation falling on the surrounding area is typically diverted around the LAA, and most LAAs have an agricultural crop, which provides stabilizing turf or plant roots reducing erosion. Use of winery process water and/or stormwater ponds will result in less water being discharged to an LAA. Much of the precipitation that falls on an LAA will infiltrate rather than run off reducing the amount of water discharged to surface water bodies. Reducing the surface water discharge also reduces the potential for hydromodification of a surface water body channel. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the issue of potential soil erosion or the loss of top soil due to water runoff will be evaluated on a site-specific basis at that time. The General Order itself will have a less than significant impact to cause soil erosion.
- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading,

subsidence, liquefaction or collapse? **Less than Significant Impact.** See the response to item (a)(i) above.

- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? **Less than Significant Impact.** Adoption and implementation of the General Order will not have a substantial adverse effect caused by expansive soils creating substantial risks to life or property. Based on the structures that are typical at wineries, substantial adverse effects including risk of loss, injury and death are unlikely. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the issue of expansive soil will be evaluated on a site-specific basis at that time. The General Order itself will result in a less than significant impact associated with geology and soils.
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? **Less than Significant Impact.** The General Order requires adequate winery process water disposal capacity for all wineries enrolled in the General Order and contains requirements for use of a subsurface disposal system. Soils at the project location must be adequate to support the hydraulic and winery process water characteristics.

### 7. Greenhouse Gas Emissions

Greenhouse Gas Emissions Environmental Factor. Would the project:

- 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. The General Order does not address or approve any site construction for wineries, therefore emission impacts from general greenhouse gas (GHG) cannot accurately be determined. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the issue of greenhouse gas generation will be evaluated on a site-specific basis at that time. In general, construction of a winery involves 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. Operation of a winery will result in generation of some GHG emissions. The amount of GHGs produced varies depending upon the wine processing technology, winery process water treatment technology, operation and maintenance practices, and the disposal of solids. Wineries are powered by

State Water Resources Control Board Order WQ 202Y-XXXX-DWQ **Page** 41

> electricity. Because users pay for electricity based on usage, they are incentivized to employ efficient practices wherever possible. Trucks would also be used to haul grapes from vineyards to the wineries. Truck-hauling activities occur over short intervals, during crush season. Although adoption and implementation of the General Order could indirectly result in generation of greenhouse gases, the amount generated is not expected to be significant.

- 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 General Order would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The purpose of the General Order is to regulate waste discharges from wineries in a manner that protects water quality and does not include provisions that would alter greenhouse gas regulations or ordinances.
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-b above
- No Impact: None

### 8. Hazards and Hazardous Materials

Hazards and Hazardous Materials Environmental Factor. Would the project:

- 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 for people residing or working in the project area?
- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-h
- No Impact: None

## DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? **Less than Significant Impact.** Adoption and implementation of the General Order will not have the potential to create hazards or hazardous materials or create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. It is anticipated that most

wineries will not store large amounts of hazardous materials. However, wineries use sanitation and disinfection chemicals (e.g., sodium or potassium hydroxide, sodium hypochlorite, etc.). In some cases, wineries adjust winery process water pH, which may require storage of acid or base chemicals. Local authorities may limit the volume and means of on-site storage for such chemicals through the provisions of California Building Code. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order and the issue of hazards and hazardous materials will be evaluated on a site-specific basis at that time. Hazardous materials are defined and regulated under several federal and state statutes and associated regulations and the General Order does not change any regulations pertaining to hazardous materials. The General Order will have less than significant impact to the public or the environment through the routine transport, use, or disposal of hazardous materials.

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? **Less than Significant Impact.** See the response to (a) above.
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? Less than Significant Impact. See the response to (a) above.
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? **Less than Significant Impact.** See the response to (a) above.
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? Less than Significant Impact. The General Order would not add population or housing to areas. Wineries may be located in the vicinity of an airport or airstrip, but they would not add substantial numbers of employees or any residents to these areas. The General Order would not otherwise create safety hazards within the vicinity of an airport or airstrip.
- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? Less than Significant Impact. See the response to (e) above.
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? Less than Significant Impact. See the response to (a) above.
- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? Less than Significant Impact. The General Order would not

add population or housing to wildland areas nor would the wineries covered by the General Order create any new significant fire risk within wildland areas.

- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-h above
- No Impact: None

### 9. Hydrology and Water Quality

Hydrology and Water Quality Environmental Factor. Would the project:

- a) Violate any water quality standards or waste discharge requirements?
- b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
- e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
- f) Otherwise substantially degrade water quality?
- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary Map or Flood Insurance Rate Map or other flood hazard delineation map?
- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
- i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- j) Be subject to inundation by seiche, tsunami, or mudflow?
- Potentially Significant Impact: None

- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-j above
- No Impact: None

### DISCUSSION

- a) Violate any water quality standards or waste discharge requirements? Less than Significant Impact. Adoption and implementation of the General Order will not violate any water quality standards or waste discharge requirements. The General Order will be implemented by the regional water boards and compliance with the appropriate Basin Plan and other applicable State Water Board and regional water board policies is required. The General Order requires a discharger seeking enrollment to design an appropriate method of winery process water and solids treatment and disposal based on the General Order requirements and site-specific conditions and requires wineries to meet best practicable treatment or control measures. A regional water board can issue site-specific WDRs for winery discharges that cannot comply with the General Order or are otherwise ineligible for coverage under General Order. Occasional WDR violations or accidental discharges could occur if the treatment system does not function properly, but monitoring provisions imposed by the regional water boards will identify such circumstances so that they can be corrected.
- Substantially deplete groundwater supplies or interfere substantially with groundwater b) recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? Less than Significant Impact. Adoption and implementation of the General Order will not have a significant impact to groundwater supplies or recharge. In some cases, the source water for a winery will be groundwater; therefore, pumping groundwater has the potential to affect the groundwater supply. However, the common practice of landscape or crop irrigation at LAAs with treated winery process water will replace water that may otherwise have been used for that purpose. A less than significant impact to groundwater recharge is anticipated as a result of adoption and implementation of the General Order. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order and the issue of groundwater supply and/or recharge impacts will be evaluated on a site-specific basis at that time.
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? Less than Significant Impact. Wineries are not typically constructed in drainage areas that would require changing the course of a stream

or river. Construction activity will be performed consistent with local ordinances and a construction stormwater permit to minimize erosion and siltation issues.

- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? Less than Significant Impact. See the response to item (c) above. Furthermore, the use of ponds to store winery process water and/or stormwater mixtures will result in reduced peak stormwater discharges and the potential for hydromodification of a stream channel.
- e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? Less than Significant Impact. Some wineries that can be covered under the General Order typically contain the stormwater that falls on the facility footprint. Some wineries may allow stormwater to discharge to existing stormwater collection systems. However, winery process water is applied to the LAA to maximize infiltration and is not allowed to discharge off-site. The General Order does not allow application of winery process water to an LAA when there is an established probability of precipitation, thus, discharge of polluted runoff is unlikely to occur. Also, see response (d) above.
- f) Otherwise substantially degrade water quality? Less than Significant Impact. The General Order requires the discharge to comply with the applicable regional water board's Basin Plan water quality objectives and statewide plans/policies and prohibits the pollution of groundwater or surface water or negative impacts to any beneficial use.
- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary Map or Flood Insurance Rate Map or other flood hazard delineation map? **Less than Significant Impact.** The General Order covers wineries only and does not address the construction of new housing or other major structures. The General Order does not address or modify local zoning, which determines acceptable housing locations; therefore, the General Order would not result in housing or other structures being placed within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary Map, Flood Insurance Rate Map, or other flood hazard delineation map.
- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? Less than Significant Impact. The General Order only covers wineries and does not address the construction of new housing or other major structures. Wineries covered by the General Order might be constructed within 100-year flood hazard areas. A projectspecific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the issue of flood hazard area impacts will be evaluated on a site-specific basis at that time. If a winery process water pond is

constructed in a flood hazard area, it must be designed to prevent inundation using the 100-year, 24-hour peak storm design standard.

- i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? Less than Significant Impact. Adoption and implementation of the General Order is not expected to expose people or structures to a significant risk involving flooding. Some wineries will use winery process water ponds either as treatment or storage facilities. In nearly all cases, the ponds will be outside the jurisdictional size limits of the California Department of Water Resources, Division of Safety of Dams. For new or expanding wineries that employ ponds, pond design by a California licensed civil engineer is required. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the issue of flood hazard will be evaluated on a site-specific basis at that time.
- j) Be subject to inundation by seiche, tsunami, or mudflow? Less than Significant Impact. The General Order does not address local zoning, which determines acceptable facility locations; therefore, the General Order would not result in wineries being placed within a location subject to inundation by seiche, tsunami, or mudflow. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the issue of inundation by seiche, tsunami, or mudflow will be evaluated on a site-specific basis at that time.

### 10. Land Use and Planning

Land Use Planning Environmental Factor. Would the project:

- a) Physically divide an established community?
- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-c above
- No Impact: None

### DISCUSSION

- a) Physically divide an established community? Less than Significant Impact. The General Order addresses winery process water collection, treatment, and disposal. A projectspecific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; any issues, such as placement of a new or expanding winery that physically divides an established community, will be evaluated on a sitespecific basis at that time. Furthermore, the General Order is unlikely to conflict with another agency's plan and does not address zoning or land use designations.
- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? Less than Significant Impact. Adoption and implementation of the General Order is not expected to conflict with any applicable land use plan, policy, or regulation. The General Order is consistent with policies of the State Water Board and regional water boards. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the issues will be evaluated on a site-specific basis at that time. However, the General Order is unlikely to conflict with another agency's plan and does not address zoning or land use designations. Such changes would require entitlements from local land use authorities.
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan? **Less than Significant Impact.** See the response to item (b) above.

### **11. Mineral Resources**

Mineral Resources Environmental Factor. Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- 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?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-b above
- No Impact: None

### 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 and

implementation of the General Order is not expected to impact the availability of a known mineral resource. The General Order will be used to regulated discharges of winery process water and solids to land that are typically located in agricultural areas. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; mineral resource issues will be evaluated on a site-specific basis at that time.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? Less than Significant Impact. See the response to item (a) above.

#### 12.Noise

Noise Environmental Factor. Would the project:

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-f above
- No Impact: None

### DISCUSSION

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Less than Significant Impact. Construction activities associated with building a winery will

generate temporary 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 and time intervals in compliance with any applicable local noise ordinances. The duration of construction activity varies with the size of the facility. Wineries are typically located in remote areas and generally do not generate substantial levels of noise. There may be some localized noise generated at the facility that could run intermittently throughout the day. The noise and groundborne vibrations from these normal activities would be localized and centered around the winery and would be unlikely to significantly affect persons outside the property boundaries. Some wineries hold public events such as wine tastings, weddings, and concerts that may increase noise levels, however, these would require compliance with any applicable local permitting or ordinances. The issuance of permits for this type of outdoor activity and the determination of whether such activities fall within the scope of the land use permits issued for the facilities is beyond the scope of this analysis.

- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? **Less than Significant Impact**. See the response to item (a) above.
- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Less than Significant Impact. See the response to item (a) above.
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? Less than Significant Impact. See the response to item (a) above.
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? Less than Significant Impact. Wineries do not generate substantial levels of noise and the General Order would not add population or housing to areas. Wineries may be located in the vicinity

of an airport or airstrip, but they will not add substantial numbers of employees or any residents to these areas.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? Less than Significant Impact. See the response to item (e) above.

### 13. Population / Housing

Population and Housing Environmental Factor. Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-c above
- No Impact: None

## DISCUSSION

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? **Less than Significant Impact.** The General Order will not alter the number of wineries that would be constructed in the future and wineries do not induce population growth; therefore, the General Order is unlikely to induce substantial population growth. The General Order does not change zoning or land use designation which would be required prior to the addition of homes, businesses, roads and infrastructure. Such changes would require entitlements from local land use authorities.
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? Less than Significant Impact. The General Order only addresses wineries and displacement of substantial numbers of existing housing is unlikely. A project-specific CEQA evaluation will be performed for new or expanding

wineries seeking coverage under the General Order, the issue of displaced existing housing will be evaluated on a site-specific basis at that time.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? Less than Significant Impact. See the response to item (b) above.

### 14. Public Services

Public Services Environmental Factor. Would the project:

- a) 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:
  - i. Fire protection?
  - ii. Police protection?
  - iii. Schools?
  - iv. Parks?
  - v. Other public facilities?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a(i-iv) above
- No Impact: None

## DISCUSSION

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection? Schools? Parks? Other public facilities? Less than Significant Impact. Wineries will not add new residents or change land uses, and, therefore, would not generate a demand for additional public services such as fire protection, police protection, schools, parks, and other public facilities. New or expanding wineries would not result in

substantial adverse physical impacts associated with provisions of or need for new or physically altered governmental facilities.

#### 15. Recreation

Recreation Environmental Factor. Would the project:

- a) 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) Or 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?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-b above
- No Impact: None

### DISCUSSION

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Less than Significant Impact. The General Order would not add new residents or change land uses, and, therefore, is not expected to impact the use of existing neighborhood and regional parks or other recreational facilities.
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?
   Less than Significant Impact. See the response to item (a) above.

#### **16. Transportation / Traffic**

Transportation and Traffic Environmental Factor. Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of

the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- e) Result in inadequate emergency access?
- f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-f above
- No Impact: None

### DISCUSSION

- a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? Less than Significant Impact. The adoption and implementation of the General Order will not conflict with an applicable plan, ordinance, or policy related to transportation. Wineries are designed to accommodate grape delivery trucks during the crush season and are not expected to significantly affect traffic or transportation services. Large facilities that expect significant truck deliveries are designed to accommodate the vehicles off public highways to prevent traffic hazards. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the issue of traffic/ transportation plan, ordinance, policies, and effectiveness of the performance of the circulation system will be evaluated on a site-specific basis at that time. The General Order itself will have less than significant impact on transportation-related ordinances or policies.
- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by

the county congestion management agency for designated roads or highways? **Less than Significant Impact.** See the response to item (a) above.

- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? Less than Significant Impact. See the response to item (a) above.
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Less than Significant Impact. See the response to item (a) above.
- e) Result in inadequate emergency access? Less than Significant Impact. See the response to item (a) above.
- f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? Less than Significant Impact. See the response to item (a) above.

#### **17. Utilities and Service Systems**

Utilities and Service Environmental Factor. Would the project:

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
- e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- g) Comply with federal, state, and local statutes and regulations related to solid waste?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None

- Less Than Significant Impact: a-g above
- No Impact: None

### DISCUSSION

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? Less than Significant Impact. The General Order will be implemented by the regional water boards and includes requirements for implementing best practicable treatment or control measures. The General Order is consistent with water quality policies. Adoption and implementation of the General Order will not cause winery process water to exceed (be worse than) requirements of a regional water board. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; compliance of individual wineries will be evaluated on a site-specific basis at that time.
- Require or result in the construction of new water or wastewater treatment facilities or b) expansion of existing facilities, the construction of which could cause significant environmental effects? Less than Significant Impact. Dischargers seeking coverage under the General Order may be required to make improvements in treatment, storage, or disposal methods for winery process water. Those requirements may result in new or expanded winery process water treatment systems being constructed. Any new or expanded facilities are unlikely to significantly affect the environment due to the requirements contained in the General Order. Winery treatment systems are privately owned and operated, and generally have no effect on existing publicly owned treatment works (POTW). Some small wineries may elect to tank and haul their wastewater to a POTW. Those discharges are controlled by the POTW industrial waste discharge permit requirements. In addition, a project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the potential for significant environmental effects will be evaluated on a site-specific basis at that time. Adoption and implementation of the General Order will not result in construction or expansion of POTW facilities
- c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? **Less than Significant Impact.** Adoption and implementation of the General Order would not directly require or result in the construction of new stormwater drainage facilities or expansion of existing facilities. Existing wineries typically address stormwater drainage by containing it on-site. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; potential environmental

> impacts of new or expanding stormwater drainage facilities will be evaluated on a sitespecific basis at that time.

- d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? Less than Significant Impact. The General Order will not require new or expanded water supply entitlements. Construction of new or expanding wineries may require some water supplies to accommodate the construction processes. Supplemental irrigation water may be needed to grow a crop in an LAA. However, the General Order will not change the water supply needs or require new or expanded entitlements, especially over existing agricultural activities. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; water supply needs and necessity for new or expanded entitlements will be evaluated on a site-specific basis at that time.
- e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? **Less than Significant Impact.** Wineries that discharge process water to sanitary sewer collection systems are exempt from the requirements of the General Order. Those wineries are issued waste discharge permits from the wastewater treatment providers. An evaluation of capacity is part of the waste discharge permit issuance process.
- f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? Less than Significant Impact. Wineries typically apply solids generated on-site or at nearby agricultural lands; any solids that require off-site disposal may go to regulated compost facilities or landfills and would not be significant enough to cause capacity issues at a landfill. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the potential for landfill capacity effects will be evaluated on a site-specific basis at that time. The General Order itself will result in less than significant impact to the capacity of landfill facilities.
- g) Comply with federal, state, and local statutes and regulations related to solid waste? Less than Significant Impact. The General Order requires dischargers to comply with federal, state, and local statutes and regulations related to solid waste.

### **18. Mandatory Findings of Significance**

Mandatory Findings of Significance Environmental Factor.

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

animal or eliminate important examples of the major periods of California history or prehistory?

- 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?
- Potentially Significant Impact: None
- Less Than Significant with Mitigation Incorporated: None
- Less Than Significant Impact: a-c above
- No Impact: None

### DISCUSSION

- Does the project have the potential to degrade the quality of the environment, substantially a) reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? Less than Significant Impact. The General Order only addresses winery process water and solids discharged to land. Direct or indirect discharges to surface water are prohibited under the General Order. Furthermore, discharges are prohibited from polluting groundwater or surface water, adversely affecting beneficial uses of groundwater, or causing an exceedance of any applicable water quality objective for groundwater or surface water in the applicable Basin Plan or other applicable State Water Board and regional water board policies. As a result, surface water quality and aquatic species are unlikely to be affected. A project-specific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order; the potential for the factors to be degraded will be evaluated on a site-specific basis at that time.
- Does the project have impacts that are individually limited, but cumulatively considerable? b) ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? Less than Significant **Impact.** As described in item (a) above, this evaluation does not address a project-specific evaluation; however, based on typical wineries, construction of new, or expansion of wineries, are unlikely to result in cumulatively considerable effects on the environment. In addition, the General Order is unlikely to change the land development economics and, therefore, it will not change the number of wineries constructed. It is at the discretion of each local land use authority whether to allow the construction of new or expanded wineries 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 wineries in a given area. Limited degradation of groundwater by some of the typical waste constituents released with discharge from a winery after effective source control, treatment, and control is consistent with maximum benefit to the people of California. The General Order contains an analysis of the potential for water quality degradation. The best practicable treatment or control measures contained in the General Order minimize any water quality degradation. The cumulative impacts associated with siting multiple wineries in a given area can be addressed in sitespecific environmental analyses, which will be required for new and/or expanding facilities.
- c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? **Less than Significant Impact.** Potential impacts to human beings from implementation of the General Order such as impacts to water quality or public health are expected to be less than significant. Dischargers obtaining coverage under the General Order are subject to the State Water Board policies,

> regional water board Basin Plans and policies, and local agencies siting criteria. A sitespecific CEQA evaluation will be performed for new or expanding wineries seeking coverage under the General Order to fully assess the potential for environmental impacts that might cause adverse effects on human beings, either directly or indirectly.

### **19. Preliminary Staff Determination**

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

**Note**: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino,(1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

### 20. Environmental Factors Potentially Affected

Mitigation measures were identified in this Initial Study for potential, significant impacts to tribal cultural resources.

| Commenter   | Comment Summary   | Response                             |
|---|---|--------------------------------------|
| Native<br>American<br>tribal cultural<br>resource<br>consultation | A potential for impacting cultural<br>resources, both on traditional tribal lands<br>and at areas that have cultural<br>significance located off traditional tribal<br>lands exists. There may be instances<br>where cultural resources that were<br>previously unknown are discovered. | Initial Study sections II.D.5(a – f) |

#### IV. Summary of Significant Impacts and Mitigation Measures

## V. Determination

On the basis of this initial evaluation:

| NO  | I find that the proposed project COULD NOT have a significant<br>effect on the environment, and a NEGATIVE DECLARATION will<br>be prepared.   |
|-----|---|
| YES | I find that although the proposed project could have a significant<br>effect on the environment, there will not be a significant effect in<br>this case because revisions in the project have been made by or<br>agreed to by the project proponent. A MITIGATED NEGATIVE<br>DECLARATION will be prepared.  |
| NO  | I find that the proposed project MAY have a significant effect on<br>the environment, and an ENVIRONMENTAL IMPACT REPORT is<br>required.  |
| NO  | I find that the proposed project MAY have a "potentially significant<br>impact" or "potentially significant unless mitigated" impact on the<br>environment, but at least one effect 1) has been adequately<br>analyzed in an earlier document pursuant to applicable legal<br>standards, and 2) has been addressed by mitigation measures<br>based on the earlier analysis as described on attached sheets. An<br>ENVIRONMENTAL IMPACT REPORT is required, but it must<br>analyze only the effects that remain to be addressed. |
| NO  | I find that although the proposed project could have a significant<br>effect on the environment, because all potentially significant<br>effects (a) have been analyzed adequately in an earlier EIR or<br>NEGATIVE DECLARATION pursuant to applicable standards,<br>and (b) have been avoided or mitigated pursuant to that earlier<br>EIR or NEGATIVE DECLARATION, including revisions or<br>mitigation measures that are imposed upon the proposed project,<br>nothing further is required                                    |

| Prepared by  |
|--|
| Signature:   |
|  |
|  |
| Date:  |
| Printed Name and Title: Stephanie Torres, Engineering Geologist      |
| Reviewed by  |
| Signature:   |
|  |
|  |
| Date:  |
| Printed Name: Laurel Warddrip, Senior Environmental Scientist        |
| Approved by  |
| Signature:   |
|  |
|  |
| Date:  |
| Printed Name: Karen Mogus, Division of Water Quality Deputy Director |

### VI. References

California <u>Department of Forestry and Fire Prevention, Annual Precipitation Rates in</u> <u>California 1900-1960</u>. <a href="http://www.california.com/webdata/maps/statewide/rainmap.pdf">http://www.california.com/webdata/maps/statewide/rainmap.pdf</a>. Accessed 16 April 2018.

<u>California Department of Forestry and Fire Prevention, Bioregion Boundaries in California</u>. <http://discommonshipediscommonshi commonshipediscommonshipediscommonshipediscommonshipedis

<u>California Department of Water Resources, 2003, California's Groundwater Bulletin 118</u>. <http://wdl.water.ca.gov/groundwater/bulletin118/gwbasins2003.cfm>. Accessed 16 April 2018.

California Department of Water Resources, 2003, Hydrologic Regions and Groundwater in California.

<a href="http://www.water.ca.gov/groundwater/bulletin118/maps/statewide\_basin\_map\_V3\_subbas.pdf">http://www.water.ca.gov/groundwater/bulletin118/maps/statewide\_basin\_map\_V3\_subbas.pdf</a>>. Accessed 16 April 2018.

<u>California Natural Resources Agency, CEQA Statute</u>. <http://resources.ca.gov/ceqa/stat/>. Accessed 16 April 2018.

California Environmental Resources Evaluation System, 2003, California's Bioregions. <http://www.ceres.ca.gov/geo\_area/bioregions/>. Accessed 16 January 2008.

<u>U.S. Geological Survey, 1995, Groundwater Atlas of the United States: California, Nevada</u> <u>HA 730-B</u>. <http: pubs.usgs.gov/ha/ha730/ch\_b/index.html>. Accessed 16 April 2018.

<u>U.S. Geological Survey, 2003, Bioregions of the Pacific Southwest</u>. Available: <http://www.werc.usgs.gov/researchtopicpage.aspx?id=20>. Accessed 16 April 2018.