STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2017-0072

MITIGATED NEGATIVE DECLARATION TO FULFILL
CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS
FOR
STATEWIDE GENERAL ORDER FOR DISCHARGES FROM
NATURAL GAS UTILITY CONSTRUCTION, OPERATIONS AND MAINTENANCE ACTIVITIES

WHEREAS:

1. California Water Code section 13263(i) provides that the State Water Resources Control Board (State Water Board) may prescribe general waste discharge requirements (WDRs) for a category of discharges to serve as a statewide General Order. The statewide General Order shall implement the provisions, prohibitions, and water quality objectives contained in statewide and/or region-specific water quality control plans that govern the discharge.

2. Natural gas companies and their contractors construct, operate, and maintain facilities for the transmission and distribution of natural gas to industrial, commercial, institutional, governmental, and residential customers in California. The companies conduct mandatory facility inspections and testing to ensure public health and safety. Discharges from natural gas facilities include discharges resulting from excavation (e.g., conventional excavation and hydro-excavation), construction site dewatering, testing (e.g., hydrostatic testing), and repair activities: (1) to waters of the United States (U.S.), (2) to non-federal surface waters of the state, and (3) to land, with the potential of reaching groundwater (a water of the state).

3. State Water Resources Control Board (State Water Board) staff prepared a statewide General Order (General Order) for planned, emergency, and unplanned discharges from activities including hydrostatic testing of existing and new natural gas facilities, excavation, site dewatering, construction, testing, operation, maintenance and repair of natural gas facilities. The adoption of the portion of the General Order allowing discharges to waters of the state involves a discretionary project for approval by the State Water Board within the meaning of the California Environmental Quality Act (Public Resources Code section 21000 et. seq., hereinafter CEQA). Therefore, the State Water Board permitting action to adopt the General Order is subject to environmental review pursuant to CEQA. The State Water Board is the lead agency for the CEQA evaluation.

4. Consistent with Public Resources Code section 21080.3, the State Water Board consulted with responsible and trustee agencies regarding the project before determining the type of CEQA document to prepare. Staff developed the list of agencies to be consulted with assistance from the California Office of Planning and Research. Staff transmitted a draft Initial Study on September 12, 2016 to all identified agencies. Comments were received from the California Department of Fish and Wildlife and the California Coastal Commission. Mitigation measures addressing biological resources were added to the Initial Study Section 3.4.4(a, b) and are summarized in Initial Study Table 5. The General Order includes requirements implementing these mitigation measures, including biological screening for work done in sensitive areas, to reduce any potential impacts to a level that is less than significant.

5. Consistent with the Public Resources Code section 21080.3, the State Water Board provided an opportunity for a Native American tribal cultural resource consultation. One tribe responded within the time period specified pursuant to Public Resources Code section 21080.3.1, subd. (b)(2) and one tribe responded after the time period. The State Water Board consulted with both tribes that requested consultation. Staff added mitigation measures addressing cultural resources, including tribal cultural resources, to the Initial Study Section 3.4.5(a - d) and Section 3.4.17(a - b) and summarized them in Initial Study Table 5. The General Order includes requirements to implement these mitigation measures as described more fully below.

6. The State Water Board considered the environmental impacts associated with the adoption of the General Order and prepared an Initial Study in accordance with the California Code of Regulations, title 14 section 15063. Many of the activities described in the General Order are categorically exempt from CEQA. (Cal. Code Regs. tit. 14, §15300). CEQA section 15300.2 provides exceptions to the categorical exemptions based on location, cumulative impact, significant impact, scenic highways, hazardous waste sites, and historical resources. Because this General Order covers the entire state, one or more of the exceptions may be encountered when pipeline operators seek enrollment under this General Order.

7. The attached Mitigated Negative Declaration addresses the environmental factors that can be reasonably anticipated when considering the use of the General Order on a statewide basis. The Initial Study does not address a site-specific project. Therefore, impacts that may result for site-specific projects for some of the environmental factors are not reasonably foreseeable.

8. Analysis in the Initial Study and early consultation with responsible and trustee agencies did not identify any significant impacts on the environment that could not be mitigated.

9. Consultation with Native American Tribal representatives resulted in Tribal concern of potential impacts on cultural resources, both on traditional tribal lands and in areas that have cultural significance located off traditional tribal lands. Per Tribal representatives' request, the General Order was modified to require a 30-day pre-notification of planned discharges to interested Tribes for collaboration in potential discovery of previously unknown cultural resources. To address these impacts, the Mitigated Negative Declaration recommends mitigation measures through the General Order that includes the following:

    - A review of site conditions by a registered professional archeologist before projects start;
    - Avoidance when sensitive areas are present, and rescheduling activities that may conflict with tribal ceremonial dates;
    - Treatment and BMPs to protect beneficial uses of surface and groundwater, and prevent hydro-modification and erosion;
    - Pre-monitoring of priority pollutants and compliance monitoring;
    - Public reporting, and
    - Pre-discharge notifications to project specific stakeholders.

    In case of inadvertent discoveries, crew will stop work and notify a qualified archeologist.

10. The State Water Board distributed a draft Mitigated Negative Declaration and proposed General Order for a 30-day public comment period. The State Water Board held a public hearing on October 3, 2017, prior to the public comment due date of October 10, 2017. The State Water Board provided responses to all timely public comments in a separate Response to Comments document, made available to all interested parties prior to its consideration of adoption at its December 5, 2017 board meeting.

11. Public notice of the General Order and Negative Declaration was transmitted via U.S. mail to applicable applicants for enrollment under the proposed General Order, all commenting state agencies, all commenting Native American tribes, and all 58 county clerks for a 30-day posting of the CEQA notice. A legal notice was published in six newspapers with the largest circulation in geographic areas across the state. Additionally, automated e-mail messages containing the public notice were transmitted to the Lyris list related to the General Order, and the notice was published on the State Water Board's Internet webpage.

12. The State Water Board conducted a public meeting on December 5, 2017, in Sacramento to consider approval of the Mitigated Negative Declaration and adoption of the General Order.

13. The interested parties can find the documents and other materials that constitute the record of proceedings on which the State Water Board findings are based on at the State Water Resources Control Board, Division of Water Quality, 1001 I Street, 15th floor, Sacramento, California, 95814. The custodian for these documents is the Division of Water Quality.

14. The State Water Board will file a Notice of Determination for this project with the Governor's Office of Planning and Research within five working days from issuance of this resolution in accordance with California Code of Regulations, title 14, section 15075.

THEREFORE BE IT RESOLVED THAT:

The State Water Board has determined that the proposed project will have a less-than-significant effect on the environment as described in the Initial Study and hereby approves the attached mitigated negative declaration.

CERTIFICATION

The undersigned Clerk to the Board hereby does certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on December 5, 2017.

AYE:	Chair Felicia Marcus Vice Chair Steven Moore Board Member Tam M. Doduc Board Member Dorene D'Adamo Board Member E. Joaquin Esquivel
NAY:	None
ABSENT:	None
ABSTAIN:	None

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Jeanine Townsend
Clerk to the Board

Initial Study and Mitigated Negative Declaration

For

Statewide General Order for Discharges from Natural Gas Utility Construction, Operations and Maintenance Activities

State Water Resources Control Board
Order WQ 2017-0029-DWQ

MITIGATED NEGATIVE DECLARATION

Pursuant to Public Resources Code section 21080(c)

Project Title: Statewide General Order for Discharges from Natural Gas Utility Construction, Operations and Maintenance Activities

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

Project Description: The State Water Resources Control Board (State Water Board) has prepared this Initial Study pursuant to the California Environmental Quality Act (CEQA). This Initial Study evaluates the effects of issuing a statewide General Order for discharges from natural gas utility construction, operation and maintenance activities. These discharges may be generated from construction, operations, and maintenance activities conducted on natural gas facilities. Facilities are defined as pipelines, associated valves, and appurtenances used for the transmission of natural gas. The discretionary action of adopting the General Order is a project under the California Environmental Quality Act (CEQA); therefore, this project description and initial study (hereafter Initial Study) was prepared. Hydrostatic pressure testing is a process that uses water to exert pressure on a natural gas facility at levels greater than the normal operating pressure. Because the natural gas facility equipment is normally underground, site dewatering is sometimes required for construction, hydrostatic testing and maintenance. This Initial Study also addresses reuse or disposal of water from site dewatering. Wastewater from natural gas utility construction, operations, and maintenance activities may be discharged to surface water or to land. However, the State Water Board permitting actions allowing discharges to waters of the United States are exempt from the CEQA process.

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

Contact Person: Erling Rockwell	**Telephone:** (916) 341-5478 **e-mail:** *erling.rockwell@waterboards.ca.gov*

Adopted at a meeting of the State Water Resources Control Board held on December 5, 2017.

AYE:	Chair Felicia Marcus Vice Chair Steven Moore Board Member Tam M. Doduc Board Member Dorene D'Adamo Board Member E. Joaquin Esquivel
NAY:	None
ABSENT:	None
ABSTAIN:	None

Jeanine Townsend
Clerk to the Board

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Acronyms and Abbreviations	
AB	Assembly Bill
Basin Plan	Water Quality Control Plan
BOD	biochemical oxygen demand
BPTC	Best Practicable Treatment or Control
Cal. Code Regs. or CCR	California Code of Regulations
CARB	California Air Resources Board
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Prevention
CH_4	Methane
CO_2	Carbon Dioxide
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERES	California Environmental Resources Evaluation System
Clean Water Act	Water Pollution Control Act of 1972
CNDDB	California Natural Diversity Database
DDW	State Water Board Division of Drinking Water
Delta	Sacramento-San Joaquin River Delta
DWR	California Department of Water Resources
e.g.	Latin *exempli gratia* (for example)
EIR	Environmental Impact Report
ESA	Endangered Species Act of 1973
General Order	General Waste Discharge Requirements
GHG	Greenhouse Gas
H_2S	Hydrogen Sulfide
LOS	level-of-service
NCCP	Natural Community Conservation Plan
NPDES	National Pollutant Discharge Elimination System
OPR	Office of Planning and Research
PCBs	Polychlorinated Biphenyls
PDF	Portable Document Format
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1969
Pub. Resources Code	Public Resources Code
Regional Water Board	Regional Water Quality Control Board
§	Section
SB	Senate Bill
State Water Board	State Water Resources Control Board
TSCA	Toxic Substance Control Act
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	U.S. Geological Survey
WDR	Waste Discharge Requirement
WQO	Water Quality Order

1 Introduction

1.1 Overview and Regulatory Guidance

The State Water Resources Control Board (State Water Board) has prepared this Initial Study pursuant to the California Environmental Quality Act (CEQA). This Initial Study evaluates the effects of issuing a statewide General Order for discharges from natural gas utility construction, operation and maintenance activities. These discharges may be generated from construction, operations, and maintenance activities conducted on natural gas facilities. Facilities are defined as pipelines, associated valves, and appurtenances used for the transmission of natural gas. Analysis of underground reservoirs used to store natural gas is not included in this analysis. The State Water Board's discretionary action of adopting the waste discharge requirements in the General Order is a project under the California Environmental Quality Act (CEQA); therefore, this project description and initial study (hereafter Initial Study) was prepared.

Hydrostatic pressure testing is a process that uses water to exert pressure on a natural gas facility at levels greater than the normal operating pressure. Because the natural gas facility equipment is normally underground, site dewatering is sometimes required as part of the hydrostatic test. The Initial Study also addresses reuse or disposal of water generated from site dewatering associated with construction, operations, and maintenance activities.

Wastewater from construction, operations, and maintenance activities may be discharged to surface water or to land. The receiving waters can be classified as shown below:

- Non-federal waters of the United States mean surface water, including saline waters, within the boundaries of the state that are not waters of the United States. Discharge to certain waters of the state (e.g., wetlands or vernal pools) are prohibited in the General Order.

- Waters of the United States are distinguished from non-federal surface waters of the states by certain characteristics. Discharges of wastewater and/or site dewatering water to waters of the United States are regulated by the Clean Water Act.

For the purposes of this evaluation when considering a discharge to surface water, the difference in jurisdiction is not important because the General Order requires any discharge to a surface water to comply with the more stringent requirements imposed for discharges to waters of the United States.

The General Order allows the use of recycled water, which may be used as source water in the hydrostatic tests consistent with the requirements of the statewide water recycling criteria in the California Code of Regulations, title 22, division 4, chapter 3 (hereafter referred to as title 22), and the State Water Board Division of Drinking Water (DDW) requirements.

1.1.1 *Initial Study Preparation*

This Initial Study addresses CEQA requirements for the discretionary action of adopting a General Order and the resulting potential for reasonably foreseeable effects on the environment related to hydrostatic testing of existing natural gas facilities and site dewatering activities. This evaluation only addresses existing facilities. New or expanding facilities are subject to project specific CEQA evaluations and local land use authorities, which have discretion over approval, siting, and design of new or expanding facilities, or may qualify for a categorical exemption.

The State Water Board cannot speculate on how many facilities may be covered as a result of the General Order, and is not able to determine the location or design of any facilities that may be tested. Pursuant to California Code of Regulations, title 14, section 15064(d), a change which is speculative or unlikely to occur is not reasonably foreseeable and should not be considered in the environmental analysis. The State Water Board cannot evaluate site-specific environmental factors at this time because the General Order does not address a specific facility.

1.2 Lead Agency

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

1.3 Purpose and Organization of This Document

The document is organized as follows:

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

As a discretionary action, issuance of the General Order fits the CEQA definition of a project (Pub. Resources Code, § 21065 (c)). The State Water Board, as the project’s lead agency, has consulted with state responsible and trustee agencies before deciding whether a project’s impacts are significant (Pub. Resources Code, § 21080.3; Cal. Code Regs., tit. 14, § 15063) and prior to determining what type of CEQA document to prepare. The list of agencies consulted was developed with assistance from the California Office of Planning and Research. A draft Initial Study was transmitted on September 12, 2016 to all identified agencies. Responses were received from the California Coastal Commission and the California Department of Fish and Wildlife. Mitigations related to noxious weed control and impacts on biological resources were identified and added to the document. Analysis in the Initial Study and early consultation with responsible and trustee agencies did not identify any significant impacts on the environment that could not be mitigated.

1.4 Public Review and Comment

This Initial Study will be available for a 30-day public review and comment period as described in the Notice of Public Hearing. Comments must be received during the comment period to be considered prior to the meeting. If you have any questions about document availability or the public review and comment process, please contact Erling Rockwell at (916) 341-5478 or *erling.rockwell@waterboards.ca.gov*

2 Regulatory Setting and Project Description

2.1 Regulatory Setting

A broad network of federal and state laws provides the State Water Board, Regional Water Quality Control Boards (Regional Water Boards), State Water Board Division of Drinking Water, and local environmental and public health agencies the authority to protect beneficial uses of water, including the protection of drinking water and public health. That authority includes regulation of waste discharges and other sources of contaminants that have the potential to cause adverse water quality effects. The laws include the federal Water Pollution Control Act of 1972 (Clean Water Act), Safe Drinking Water Act of 1974, California's Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act, or Water Code), subsequent amendments to the laws, and related state policies. The Toxic Substance Control Act (TSCA) may apply to waste generated in hydrostatic tests; the TSCA is implemented by the United States Environmental Protection Agency (U.S. EPA).

California has nine Regional Water Boards (Figure 1) that work independently of each other but in cooperation with the environmental and public health agencies of the counties, cities, and, in some cases, special districts.

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 a report of waste discharge, containing the information that may be required by the Regional Water Board:

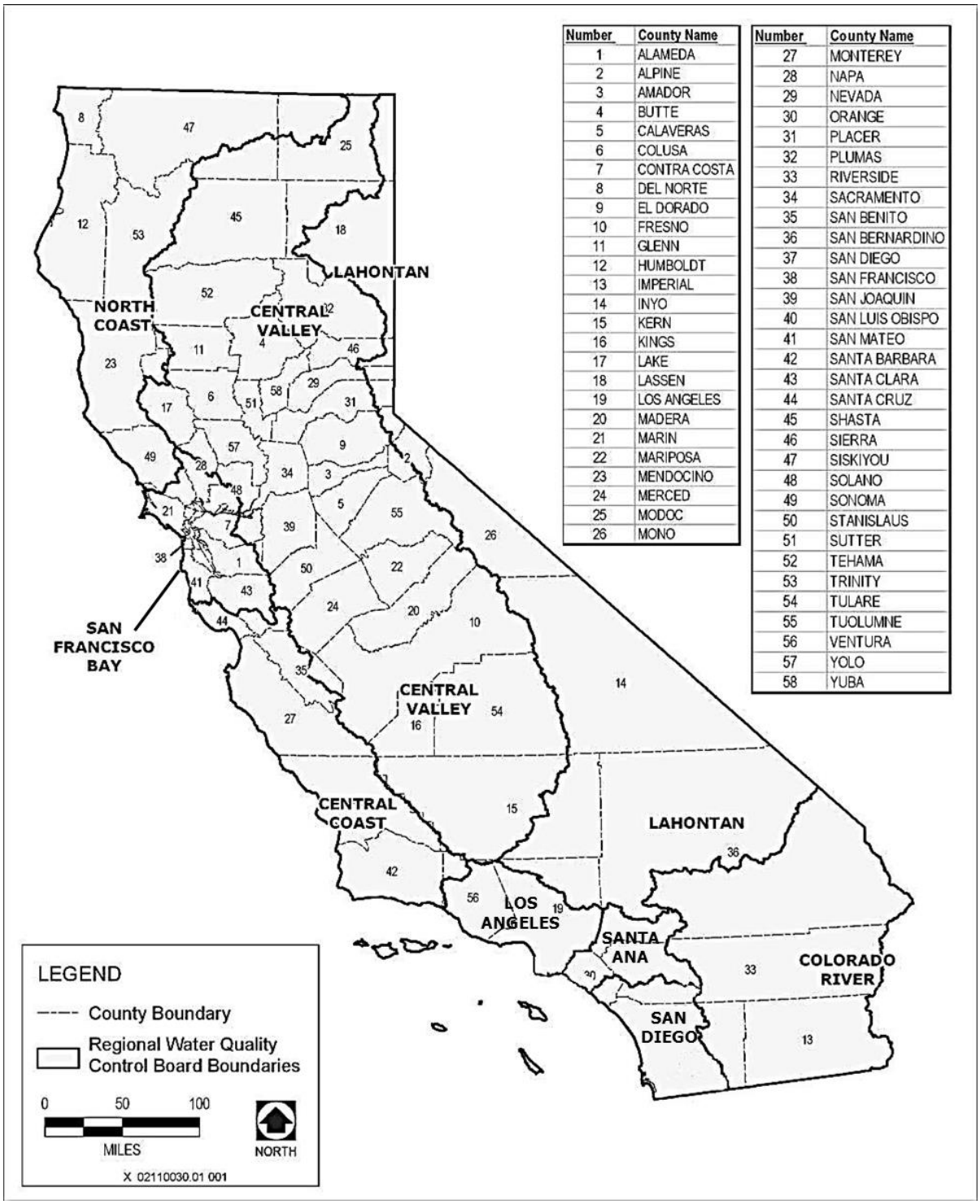
  (1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.

  (2) A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.

- 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 any new discharge of waste, making any material changes in any discharge, initiating a discharge, or making

any material changes in a discharge prior to the filing of a report of waste discharge and issuance of WDRs or a waiver of WDRs.



Number	County Name
1	ALAMEDA
2	ALPINE
3	AMADOR
4	BUTTE
5	CALAVERAS
6	COLUSA
7	CONTRA COSTA
8	DEL NORTE
9	EL DORADO
10	FRESNO
11	GLENN
12	HUMBOLDT
13	IMPERIAL
14	INYO
15	KERN
16	KINGS
17	LAKE
18	LASSEN
19	LOS ANGELES
20	MADERA
21	MARIN
22	MARIPOSA
23	MENDOCINO
24	MERCED
25	MODOC
26	MONO

Number	County Name
27	MONTEREY
28	NAPA
29	NEVADA
30	ORANGE
31	PLACER
32	PLUMAS
33	RIVERSIDE
34	SACRAMENTO
35	SAN BENITO
36	SAN BERNARDINO
37	SAN DIEGO
38	SAN FRANCISCO
39	SAN JOAQUIN
40	SAN LUIS OBISPO
41	SAN MATEO
42	SANTA BARBARA
43	SANTA CLARA
44	SANTA CRUZ
45	SHASTA
46	SIERRA
47	SISKIYOU
48	SOLANO
49	SONOMA
50	STANISLAUS
51	SUTTER
52	TEHAMA
53	TRINITY
54	TULARE
55	TUOLUMNE
56	VENTURA
57	YOLO
58	YUBA

Figure 1 Regional Water Quality Control Boards and County Boundaries

2.1.1 *Waste Discharge to Non-Federal Waters of the United States*

Waste discharges to non-federal surface waters, to land, or to groundwater are regulated by the Regional Water Boards or State Water Board (together referred to as Water Boards) which issue WDRs. WDRs require the discharge to conform to the Water Code, the Regional Water Board's Basin Plan, and applicable policies of the State Water Board and/or Regional Water Boards.

2.1.2 *Waste Discharge to Waters of the United States*

Discharges to waters of the United States are regulated by a National Pollutant Discharge Elimination System (NPDES) permit issued by the Regional Water Board. Clean Water Act section 402 requires that a discharge of any pollutant, or combination of pollutants, to surface waters that are deemed waters of the United States, with certain exceptions, be regulated by an NPDES permit.

2.1.3 *Development of Combined Regulatory General Order*

The General Order will combine the requirements for discharges to land and surface waters into one order that the gas facility operators can obtain coverage under.

2.2 CEQA Exemptions

CEQA provides exemptions for some projects. Exemptions that may apply to discharges from construction, operations, and maintenance activities of natural gas facilities include statutory or categorical exemptions.

2.2.1 *Statutory Exemptions from CEQA – Waters of the United States*

The General Order will provide authorization to discharge to both waters of the United States and non-federal waters. The action to adopt an NPDES discharge permit is exempt from the provisions of CEQA (Pub. Resources Code, section 21000, et seq.) in accordance with section 13389 of the Water Code. (See *County of Los Angeles v. California State Water Resources Control Bd.* (2006) 143 Cal. App. 4th 985.) Therefore, only discharges to land and to non-federal waters are evaluated in this Initial Study.

2.2.2 *Categorical Exemptions*

CEQA section 15300 exempts certain projects that have been determined to not have a significant effect on the environment. Table 1 summarizes the categorical exemptions that may apply to hydrostatic testing of natural gas facilities. They include:

Table 1 Categorical Exemptions

Section	Categorical Exemption
15301	Existing Facilities - Existing facilities of both investor and publicly owned utilities used to provide electric power, natural gas, sewerage, or other public utility services.
15302	Replacement or Reconstruction - Replacement or reconstruction of existing utility systems and/or facilities involving negligible or no

Section	Categorical Exemption
	expansion of capacity.
15303	New Construction or Conversion of Small Structures - Water main, sewage, electrical, gas, and other utility extensions, including street improvements, of reasonable length to serve such construction.
15304	Minor Alterations to Land - Minor trenching and backfilling where the surface is restored.

CEQA section 15300.2 provides exceptions to the categorical exemptions based on location, cumulative impact, significant impact, scenic highways, hazardous waste sites, and historical resources. Because the General Order covers the entire state, one or more of the exceptions may be encountered when natural gas facility operators seek enrollment under the order. Therefore, this Initial Study is being prepared pursuant to the CEQA Guidelines (CCR, Title 14, section 15063).

2.3 Wastewater Constituents of Concern

The primary concerns associated with wastewater discharges from construction, operations, and maintenance activities of natural gas facilities are the potential for exposure to constituents of concern, potential for exposure to recycled water pathogens, or degradation of groundwater quality.

Table 2 summarizes the typical constituents of concern associated with discharges from construction, operations, and maintenance activities of natural gas facilities.

Table 2 Typical Wastewater Constituents of Concern

Constituent of Concern	**Reason for Concern**
Biochemical oxygen demand (BOD)	A measurement of the concentration of biodegradable organic content in wastewater. The value represents the amount of oxygen required by microorganisms while oxidizing the waste constituents under aerobic conditions. Excessive BOD can create malodorous conditions.
Pathogens	Pathogenic organisms such as parasites, bacteria, and viruses found in wastewater may be excreted by human beings and animals who are infected or carriers of disease. Pathogenic organisms can cause communicable diseases through direct and indirect body contact, or ingestion of contaminated water. Pathogens may exist in recycled water; controls on recycled water use and disposal are required.
Natural Gas Condensate	Natural gas condensate may exist in natural gas facilities, typically in small volumes. Condensate is generally composed of hydrocarbons such as propane, butane, pentane, and hexane. Condensate may contain additional impurities such as hydrogen sulfide, benzene, toluene, xylenes, and ethylbenzene. Condensate can act as a carrier liquid mobilizing PCBs, if they exist in the natural gas facility segment.

Constituent of Concern	Reason for Concern
Polychlorinated Biphenyls (PCBs)	PCBs are a family of synthetic organic chemicals used as a dielectric or coolant fluid in electrical equipment, as cutting fluids, corrosion inhibitors, or for a variety of other uses. According to the U.S. EPA, PCBs cause cancer in animals and are probable human carcinogens. PCBs in natural gas facilities exist as a result of legacy uses. Measurable concentrations of PCBs may exist as a constituent in oil, in oil sheen, dissolved in natural gas condensate, or dissolved in hydrostatic test water. Various regulatory controls and concentration limits exist depending upon the medium and the concentration.
Source: Adapted from US EPA 2005, Tchobanoglous and Burton 2003 https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs	

2.4 Project Description

The State Water Board will consider adoption of a General Order that authorizes discharges from natural gas utility construction, operations and maintenance activities. Such activities are performed on existing and/or new facilities. However, the evaluation contained in this document only addresses existing facilities; new natural gas facilities are subject to project specific CEQA evaluations or may be eligible for categorical exemptions.

The source water involved in the construction, operations, and maintenance activities of natural gas facilities may include: potable water, groundwater, surface water, or recycled water. Sources of water that may enter excavations during maintenance or construction activities include: shallow groundwater, storm water inflow, or leakage from a broken or corroded water pipe. Discharges of wastewater and/or water generated from site dewatering to land may be performed for uses such as dust control, soil compaction moisture adjustment, concrete mixing, irrigation of vegetation, or percolation. (This list is not intended to limit the use of the wastewater generated due to the construction, operations, and maintenance activities of natural gas facilities and is presented for illustrative purposes only.)

Any wastewater generated from construction, operations, and maintenance activities discharged to a surface water (water of the United States, or non-federal surface water) will be required to comply with the more stringent requirements imposed for waters of the United States. Wastewater generated from construction, operations, and maintenance activities discharged to land, and subsequently to groundwater, will have different requirements.

2.4.1 *Typical Hydrostatic Pressure Test*

Hydrostatic tests will vary in size based upon the diameter of the pipeline or facility equipment and how long the tested segment is. As a result, the amount of wastewater generated will vary from a few thousand gallons to a million gallons, or more. In rare cases, up to two million gallons may be generated. This estimate is not intended to limit the size of testing activities as long as the discharge complies with the General Order requirements.

2.4.2 *Preliminary Maintenance Activities*

Before initiating a hydrostatic test, the natural gas facility operator will perform routine maintenance. Those activities will include exercising condensate drip valves to remove liquid condensate. Any liquids produced will be collected, characterized, and disposed of properly or prepared for sale. Condensate can be a marketable product and may be collected for later sale rather than disposal.

2.4.3 *Equipment Mobilization*

Equipment will be mobilized to the testing site. Equipment may include asphalt/concrete saw cutting, excavation equipment, dump trucks, water trucks, vacuum trucks, water storage trailers, truck mounted cranes, trench shoring/shielding equipment, portable welding equipment, hydrostatic testing equipment control trailer, work lighting equipment, employee sanitation facilities, and employee parking. The equipment mobilization area size will correspond to the size of the natural gas facility segment being tested. Typically, two equipment storage areas (one at either end of the pipeline segment) will be required at test locations and range in size from one to six acres. This estimate is not intended to limit the size of testing activities as long as the discharge complies with the General Order requirements.

2.4.4 *Natural Gas Facility Excavation/Access*

It is anticipated that most hydrostatic tests will require excavation of the natural gas facility equipment to provide physical access. Excavation methods will be based on site conditions. Traditional excavation methods or soil vacuum methods (hydro-excavation) may be employed. Hydro-excavation is a non-mechanical excavation process that combines high pressure water and an air vacuum. The combined excavated material is collected in a debris tank. Hydro-excavation can be a less destructive and more accurate method of excavation. Excavations will be limited to the area necessary to perform the hydrostatic test. Hydroexcavated material is typically placed on land to allow the liquid portion to drain or evaporate.

2.4.5 *Site Dewatering Considerations*

The most typical form of dewatering is sump pumping, where water that has entered the excavation is collected at a low point and is pumped into a holding tank or to the discharge point. This type of dewatering typically is short duration and of limited volume; therefore, it has a negligible effect on groundwater elevation or flow direction.

In some locations if groundwater is shallow enough to affect construction activities site dewatering may be required using wells, well points, or a similar system. Estimates of the amount of water that may be produced cannot be estimated accurately. However, dewatering activities will typically not occur along the entire length of a pipeline for hydrostatic tests; rather, dewatering will occur at locations where excavation is required for physical access. Site dewatering for construction activities is typically low threat for discharge and normally comes from the first saturated interval encountered. Typically, site dewatering is maximized early in the process then maintenance pumping is performed to maintain the lowered groundwater elevations.

When water generated from site dewatering is applied to land, it will typically be applied in close proximity to the area dewatered. Therefore, the percolating water is replacing the pumped water in the same aquifer near where it was extracted. In some areas, site dewatering may occur in areas adjacent to surface water bodies which can contribute substantial aquifer recharge. In that situation, it is likely that the water generated from site dewatering will be discharged to the surface water body. Because the site dewatering water will be discharged to the same source, that discharge is a low threat activity.

2.4.6 *Hydrostatic Testing Procedure*

To initiate a hydrostatic test, the test segment is first isolated by closing control valves. The gas contained in the isolated natural gas facility equipment is safely vented. Venting can take up to two hours and vented gas dissipates quickly into the atmosphere. If the gas ventilation is to occur in a populated area where the odorized gas might be objectionable, odors from the vented gas can be minimized by using carbon filters or similar technology. Once gas has been ventilated from the isolated segment, a short section (approximately 20 to 30 feet long) is cut out of the pipeline segment at both ends of the segment to be tested. Test head caps are installed at both ends, and end caps are installed on the pipeline ends that are not part of the pipeline segment being tested. One test head cap is typically equipped with a foam plug.

The foam plug is propelled through the test segment by pumping water into the pipeline test head cap behind the foam plug. The pumped water propels the foam plug through the test segment and displaces the air in the pipeline segment. The pipeline is then completely filled with water and the pipeline integrity can be tested by increasing the pressure of the water in the pipeline. The water pressure is increased to a pressure greater than the normal operational pipeline pressure and held for a specified period of time (typically approximately eight hours). If the pipeline segment fails the hydrostatic test, the source of the failure is identified and repaired or replaced, and the test is repeated.

After a successful test, compressed nitrogen gas (or similar inert gas) is used to push the foam plug back through the test segment to drain the hydrostatic test water. The test water is collected in above ground tanks for chemical characterization. Hinged pipe heads may be installed (replacing the test head caps) to facilitate pipeline drying. Foam plugs are repeatedly propelled through the test segment until the pipeline is dry. All water collected in the drying process is collected for characterization and proper disposal.

The test or hinged heads are removed from both ends of the test segment and the pipeline end caps are removed from the pipeline segment not tested. New or pretested replacement pipeline is installed at both ends of the test segment to reconnect it into the system. Nitrogen gas is then injected into the tested segment. The nitrogen gas is then displaced from the test segment by partially opening valves to allow natural gas to displace the nitrogen gas in the test segment. The control valves are then fully opened and the tested segment is brought back into service.

2.4.7 *Site Restoration*

The excavated areas, equipment storage areas, and any natural gas facility repair areas will be restored to their preconstruction condition to the extent practicable.

2.4.8 *Sources of Hydrostatic Test Water*

Water is needed at hydrostatic tests for dust control and as the fluid used in the hydrostatic test. The source water will be selected based on availability and cost. As indicated in Table 3, some types of wastewater require additional consideration due to the source of the hydrostatic test water. Source waters used for hydrostatic tests may include one or more sources summarized below:

Table 3 Water Source and Special Handling Requirements

Water Source	Comments	Special Requirements
Municipal supply - potable water	Typically sourced from fire hydrant; requires flow meter and municipal authorization.	None
Groundwater supply well - industrial, agricultural, or domestic well	Requires authorization from owner for use.	None
Site dewatering – onsite dewatering activities	Typically none. However, some water districts may control site dewatering extraction.	Typically none. Check for special requirements with local water district.
Surface water – surface water bodies	Appropriate water rights or authorization from authority required.	State Water Board Division of Water Rights, water user authority (e.g., irrigation district).
Recycled water – municipal wastewater system	The Title 22 Engineering Report is prepared by the recycled water producer.	Depending upon the WDRs of the treatment plant, may need additional authorization for use. Title 22 Engineering Report requirements apply.

2.4.9 *Wastewater and/or Site Dewatering Discharge*

Wastewater and/or water generated from site dewatering that is discharged will be required to meet the best practicable treatment or control (BPTC) measures that the General Order imposes based upon the receiving water. Discharges will be tested and chemically analyzed prior to the discharge to ensure that the discharge complies with the applicable effluent limits.

BPTC measures will be included in the General Order to limit or prevent discharge of waste constituents. Table 4 presents BPTC measures that are anticipated in the General Order.

Table 4 Best Practicable Treatment or Control Measures

Constituent of Concern	Best Practicable Treatment or Control Measure
Biochemical oxygen demand (BOD)	Water used in hydrostatic tests will be adequately oxidized and clarified so that substances with significant BOD will not be left in the natural gas facility equipment being tested. No additional BPTC measure is required.
Pathogens	Pathogenic risk only exists when recycled water is used as hydrostatic test source water. The recycled water will be produced pursuant to WDRs and/or a general order authorizing additional use of the recycled water (beyond what is authorized in an existing WDR order). Appropriate BPTC measures for the use of recycled water include those requirements contained in Title 22, including compliance with a Title 22 Engineering Report.
Natural Gas Condensate	Natural gas condensate may exist in some test segments. It is desirable to remove as much of the condensate as possible before filling the natural gas facility equipment with water. Appropriate BPTC measures include removing as much of the condensate as possible at drip valves before beginning the test. Once the test is performed, the wastewater will be chemically characterized prior to disposal. Low concentrations that might result from a small volume of condensate mixing with the hydrostatic test water are unlikely to be toxic to the biological treatment system at a typical wastewater treatment facility if discharged to such a facility. Such concentrations applied to land would be biodegraded in place. However, if necessary, the water could be treated using granular activated carbon or other treatment method to remove the chemical constituents of concern prior to land application or discharge to a wastewater treatment facility.

Constituent of Concern	Best Practicable Treatment or Control Measure
Polychlorinated Biphenyls	U.S. EPA regulates the use, storage, cleanup and disposal of PCBs under the regulations in 40 CFR 761 implementing the TSCA provisions for PCBs. Wastewater that does not contain a concentration of PCBs greater than 0.5 µg/L and does not possess an oily sheen or an oily layer is eligible for unrestricted use[1]. The hydrostatic test wastewater will be visually observed for separate phase products (oil sheen or floating product) and will be chemically characterized to determine if measurable dissolved phase PCBs exist in the wastewater. Wastewater that is ineligible for land application, or that contains dissolved phase PCBs, will not be land applied before treatment, or will be hauled off-site for proper disposal consistent with 40 CFR 761.79(b).

Discharge of wastewater and/or water generated from site dewatering will occur consistent with the General Order. Recycled water will be subject to the additional requirements in Title 22. Because the application of wastewater will be of limited volume and duration, the threat to groundwater quality is low.

2.4.10 *Monitoring and Reporting Program*

To evaluate compliance with the General Order, enrollees will be required to perform monitoring and submit monitoring reports to the State Water Board.

2.4.11 *Hydrostatic Test Wastewater*

All hydrostatic test wastewater will be visually inspected for the presence of separate phase products (oil sheen or floating product) and will be chemically characterized to determine if measurable dissolved phase PCBs exist in the wastewater.

Wastewater will be required to comply with the appropriate effluent limits. Wastewater that will be applied to land will be required to comply with the PCB limit and any limits imposed by Title 22 if recycled water is used. Wastewater that will be discharged to surface water will be required to comply with the waters of the United States surface water limits imposed for an NPDES discharge.

2.4.12 *Groundwater Extracted to Dewater the Subsurface*

Groundwater that is extracted for the purpose of dewatering the construction site and that will be land applied, will not be chemically analyzed unless groundwater is suspected of being impacted by a nearby contaminant source (e.g., leaking underground storage tank or similar potential source of contaminants).

[1] U.S. EPA, Correspondence to Ms. Whitney regarding reuse and discharge of water previously used for hydrostatic testing of natural gas pipelines, October 6, 2015.

If a site is located in close proximity to a hazardous waste release site, additional characterization of extracted site dewatering water will be required, consistent with the constituents of concern. Additional treatment, or disposal in a wastewater collection system, will be required if the characterization indicates the presence of contaminants at concentrations of concern.

2.4.13 *Self-Monitoring Reports*

General Order enrollees will submit monitoring reports to the State Water Board. The monitoring and reporting program included in the General Order will specify the analytes, monitoring frequency, and other parameters to be reported. General Order enrollees will be required to report significant violations of the General Order within 24-hours of noting the violation, and report how compliance will be achieved within 5 days. Emergencies shall be reported as soon as possible without interfering with the emergency response.

3 Environmental Impact Analysis

3.1 Bioregion Environmental Setting

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

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

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

Figure 2 California Bioregions

3.1.1 *Modoc Bioregion*

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

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

3.1.2 *Klamath/North Coast Bioregion*

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

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

3.1.3 *Sacramento Valley Bioregion*

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

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

3.1.4 *Bay/Delta Bioregion*

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

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

3.1.5 *Sierra Bioregion*

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

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

3.1.6 *San Joaquin Valley Bioregion*

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

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

3.1.7 *Central Coast Bioregion*

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

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

3.1.8 *Mojave Desert Bioregion*

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

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

3.1.9 *Colorado Desert Bioregion*

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

This sparsely populated bioregion encompasses all of Imperial County, the southeastern portion of Riverside County, the eastern end of San Bernardino County, and the eastern

portion of San Diego County. Its most prominent cities are Palm Springs, Rancho Mirage, and El Centro (CERES 2005). This bioregion is completely within the Colorado River Hydrologic Region.

3.1.10 *South Coast Bioregion*

This bioregion encompasses terrestrial and marine resources from Point Conception on the north to the border with Mexico (USGS 2003). It extends from the outer edge of the continental shelf to the base of the Transverse and Peninsular Ranges. This bioregion is comprised of off-coast islands, narrow mountain ranges, broad fault blocks, alluvial lowlands, and coastal terraces. Elevation ranges from sea level to over 11,400 feet (San 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.

3.2 Hydrology[2] Environmental Setting

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

3.2.1 *Precipitation*

There is relatively abundant precipitation in the state but the majority of the precipitation is concentrated in areas remote from most large urban centers and major agricultural areas. Much of the climatic variation in the state results from the patterns of global weather systems, oceanic influences, and the location and orientation of the mountains. As shown in Figure 3, northern California is much 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] General hydrology descriptions were adapted from: Planert, M. and J.S. Williams. 1995. Groundwater Atlas of the United States: California, Nevada. HA 730-B. United States Geological Survey. USGS webpage: < http://pubs.usgs.gov/ha/ha730/ch_b/index.html >; Cal Water. 1999. California Interagency Watershed Map of 1999.

3.2.2 *Runoff*

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

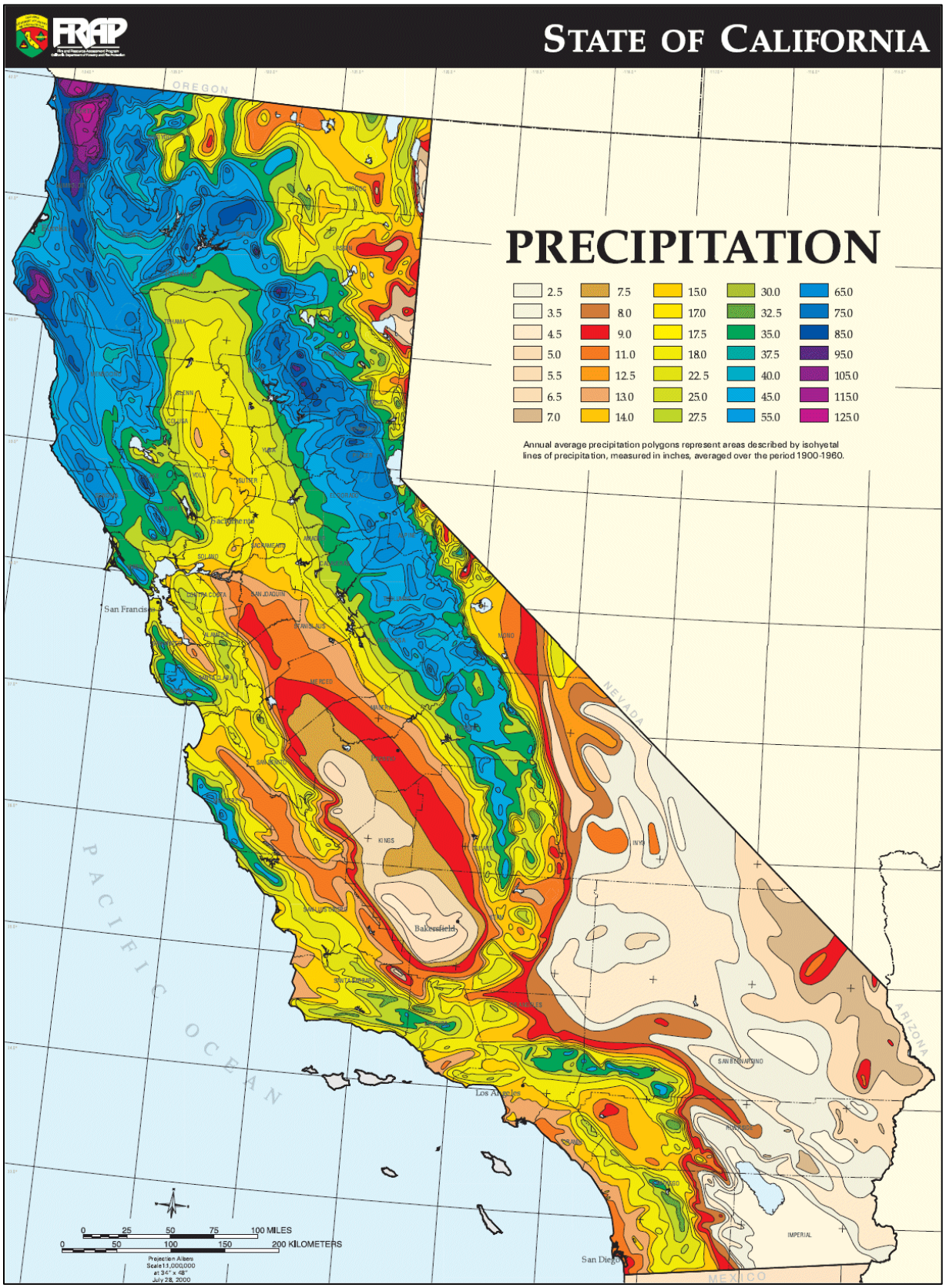


Figure 3 Annual Precipitation Rates in California (CDF, 2011)

3.2.3 *Water Surplus and Deficit*

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

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

3.3 Hydrologic Regions of California[3]

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

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

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

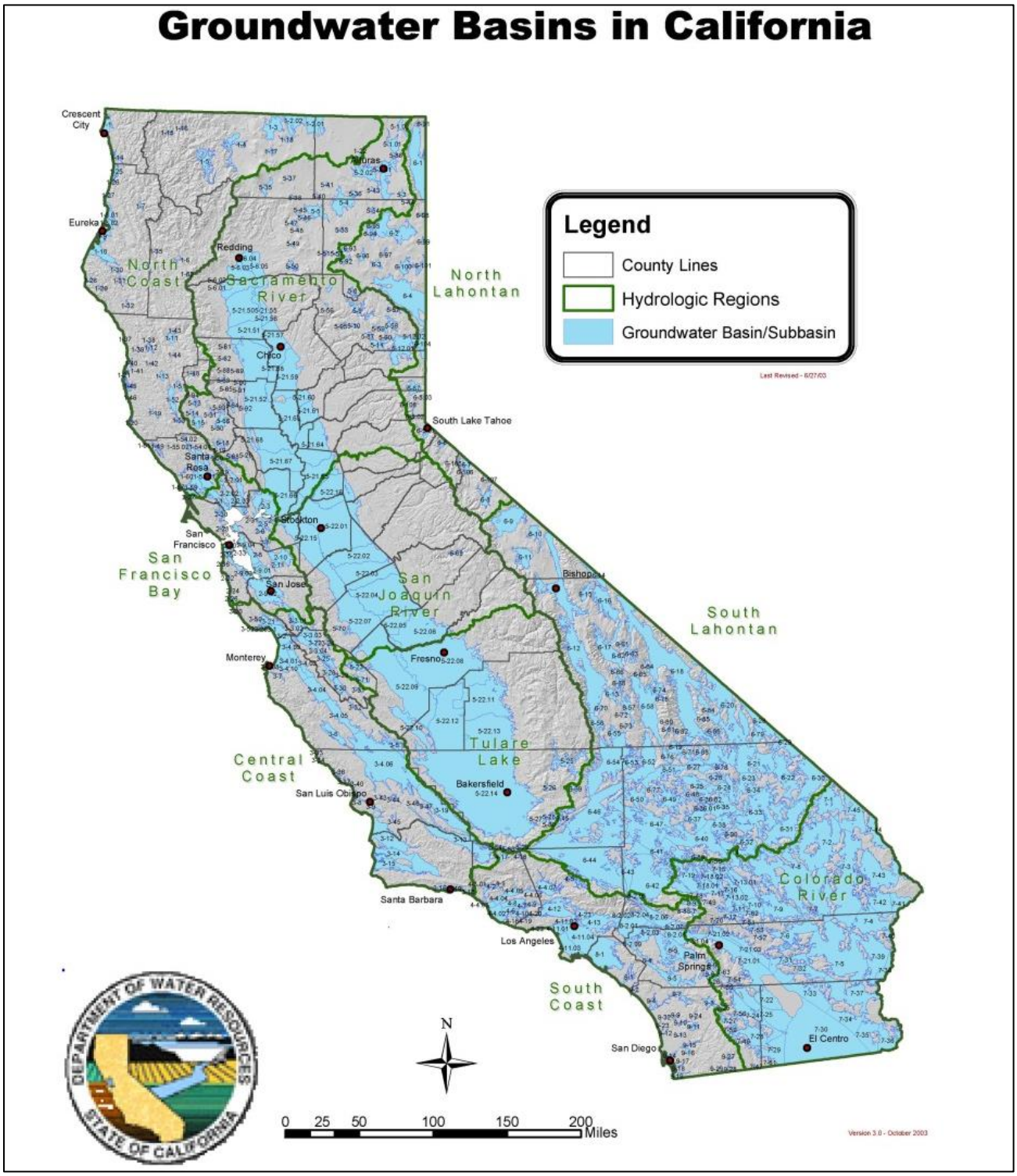


Figure 4 Hydrologic Regions and Groundwater in California (DWR, 2003)

3.3.1 *North Coast Hydrologic Region*

A majority of the surface water in the North Coast Hydrologic Region is committed to environmental uses because of the “wild and scenic” designation of most of the region’s

rivers. Average annual precipitation in this hydrologic region ranges from 100 inches in the Smith River drainage to 29 inches in the Santa Rosa area.

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

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

3.3.2 *San Francisco Bay Hydrologic Region*

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

3.3.3 *Central Coast Hydrologic Region*

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

3.3.4 *South Coast Hydrologic Region*

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

3.3.5 *Central Valley Hydrologic Region*

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

3.3.6 *Sacramento River Hydrologic Subregion*

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

3.3.7 *San Joaquin River Hydrologic Subregion*

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

3.3.8 *Tulare Lake Hydrologic Subregion*

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

3.3.9 *Lahontan Hydrologic Region*

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

3.3.10 *North Lahontan Hydrologic Subregion*

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

3.3.11 *South Lahontan Hydrologic Subregion*

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

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

3.3.12 *Colorado River Hydrologic Region*

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

3.4 Environmental Checklist

The State Water Board has prepared this Initial Study to evaluate foreseeable environmental impacts and determine if a significant impact to the environment is likely as a result of adopting the General Order. This analysis addresses hydrostatic testing of existing natural gas facilities. New or expanding natural gas facility construction will be subject to site-specific evaluation or may qualify for a categorical exemption. This analysis is also limited to non-federal surface waters of the United States and land discharge issues.

Discharge of wastewater from hydrostatic testing of natural gas facilities can create environmental risks to water quality and public health. The General Order contains requirements that reduce the risks to no impact, less than significant impact, or less than significant with mitigation. 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 natural gas facilities.

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

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

3.4.1 *Aesthetics*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista	☐	☐	☒	☐
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?	☐	☐	☒	☐

DISCUSSION

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

Less than Significant Impact. Natural gas facility hydrostatic tests and/or site dewatering could be performed in a variety of settings in many areas of California, including scenic areas. Depending on the size of the test and the test location, the potential for impact will vary greatly.

Hydrostatic testing typically requires construction activities to access and test the natural gas facility. However, the test is of limited duration (typically less than 90 days), is performed infrequently, the natural gas facility equipment will remain underground, and all areas impacted by the construction activities will be returned to their previous condition.

A project specific CEQA evaluation will be required for new and expanding natural gas facility systems seeking coverage under this General Order. The issue of scenic vistas will be evaluated on a site-specific basis. Siting criteria of the local authority will continue to establish appropriate locations for new structures or modifications to existing structures on a site-specific basis. Many local agencies have ordinances in place establishing standards for construction within scenic areas. The General Order will not affect those requirements. Activities permitted under the General Order will be intermittent and short duration, and therefore will have a less than significant impact on a scenic vista.

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

Less than Significant Impact. See the response to item (a) above. There are currently 1260.7 miles of state designated scenic highway resources. Because any above ground portions of natural gas facilities would be low-profile, impacts to scenic highways would be less than significant. The nature of these facilities would also preclude construction in or on historic buildings and rock outcroppings.

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

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

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

Less than Significant Impact. Permanent sources of external lighting are not a feature of discharges associated with natural gas facility construction, operations, and maintenance activities. If security lighting is needed during construction activities, it can be shielded to prevent substantial light or glare. Once a hydrostatic test is completed, there is no need for lighting as the natural gas facility equipment exists below ground. Security lighting, if used, would typically be required by the local land-use authority. This issue would be addressed during the site-specific evaluation of individual projects by the local authority. Adoption of the General Order will not create new sources of light or glare. The General Order will have a less than significant impact on day or night time views in the area.

3.4.2 *Agriculture and Forestry Resources*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information				

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

DISCUSSION

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

Less than Significant Impact. Discharges associated with natural gas facility construction, operations, and maintenance activities could occur on a wide variety of soil types throughout the state, including areas that could be categorized under the Farmland Mapping and Monitoring Program as Farmland of Statewide Importance and Prime or Unique Farmland. Hydrostatic tests performed on agricultural lands would be relatively short duration and would allow continued use of the land for agricultural purposes.

Because site-specific projects have not been determined, this evaluation does not address site-specific impacts. The potential for converting farmland is impossible to determine. However, natural gas facility systems are constructed or expanded to address a demand for natural gas. Because natural gas facility equipment is generally located below ground, there would be no need for long term conversion of farmland to other uses. The General Order does not change zoning or land use designation, and will not alter the economics of farmland conversion to other uses. 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 that would address any new or expanding natural gas facility system. 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 less than significant.

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

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

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

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

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

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

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

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

3.4.3 *Air Quality*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

DISCUSSION

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

Less than Significant Impact. Although this evaluation does not address project specific impacts, the potential for conflict or violation of an air quality plan is low. Equipment for construction, operations, and maintenance activities at a natural gas facility is generally powered by gasoline, diesel, or electricity. Within urban areas, electricity will be sourced from the electrical distribution system. The additional air quality impacts caused by these systems would be negligible and the overall air quality impacts caused by the uses for which the systems would serve would be analyzed by the local land use authority permitting agency.

Because the General Order does not address (or approve) any specific construction, operations, or maintenance activities, related air quality impacts cannot be accurately determined. However, construction of such systems generally requires few construction vehicles. Construction related air quality impacts are expected to be minor, and would be temporary. For new or expanding natural gas facilities, site-specific environmental review will be conducted that 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.

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. Natural gas facilities do not generally produce objectionable odors. A potential to create odors exists when venting the natural gas facility equipment. After isolating the facility equipment segment by closing valves, the gas contained in the isolated segment is vented. Venting can take up to two hours and vented gas dissipates quickly into the atmosphere. If the gas ventilation is to occur in a populated area where the odorized gas might be objectionable, odors from the vented gas will be minimized by using carbon filters or similar technology. The General Order will have a less than significant impact in creating objectionable odors.

3.4.4 *Biological Resources*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish (DFG) and Game or U.S. Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 (NCCP), or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

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 with Mitigation. The General Order addresses relatively short term activities that will be performed on areas of limited areal extent facilities. Discharges to wetlands or vernal pools are prohibited by the General Order. Therefore, the discharges are unlikely to affect a species identified as a candidate, sensitive, or special status species.

Based on the short duration, small size of the affected areas, and General Order requirements, a substantial adverse effect on biological resources is unlikely. In sensitive areas where discharges occur, and where the discharge to land results in saturated surface soils or otherwise impact species that reside in subterranean burrows, an environmental review must be conducted before the discharge is initiated. Environmental

review involves an assessment of existing conditions and may include a query of species accounts using published literature and data provided by the California Natural Diversity Data Base, field surveys, field evaluations, and biological resource monitoring. If there is the potential to have a substantial adverse effect on sensitive species identified as a threatened, endangered, candidate, or special status species identified in regional plans, policies, or regulation, appropriate avoidance and minimization measures will be applied to avoid or minimize impacts where possible. When significant unavoidable impacts to state or federal listed species may occur (e.g. take of listed species), work will begin after the appropriate state and/or federal permits are secured.

The General Order contains receiving water limitations that limit pH changes; concentrations of chemical constituents; floating material and trash; sediment and total suspended solids; toxicity; hydromodification; turbidity; dissolved oxygen depletion; floating materials; color, taste, and odor changes; biostimulation; nuisance or adverse effects; temperature changes; and radionuclide concentrations. In addition, the General Order requires compliance with Basin Plans, which identify and set objectives for beneficial uses of both surface water and groundwater.

Restoration of excavated areas, equipment storage areas, and any pipeline repair areas will be restored to their preconstruction condition to the extent practicable. Native plant species appropriate to the local area will be used where possible. Drought tolerant, non-invasive plant species will be used to revegetate. Revegetation performance criteria consist of absolute and relative vegetation cover, species richness, and plant density. Revegetation plans will be developed by a qualified biologist. Replacement plantings should be determined by a qualified, local biologist, and typically will be based on a reference site within the native plant community in the vicinity of the project.

Further, any impacts to candidate, sensitive, or special status species from the discharges authorized pursuant to the General Order will be similar to those from other existing authorized discharge options. Adoption of the General Order will not have a substantial adverse effect on any candidate, sensitive, or special status species.

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

Less than Significant with Mitigation. Discharges to wetlands or vernal pools are prohibited by the General Order. Areas of riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFW service areas where discharges from hydrostatic testing and/or site dewatering will be performed will be screened by a qualified biologist before any testing is performed. Screening involves an assessment of existing conditions and may include a query of species accounts records search using published literature and data, field surveys, field evaluations, and biological resource monitoring. If there is the potential to have a substantial adverse effect on species identified as a candidate, sensitive, or special status species (protected species) in local or regional plans, policies, or regulation, or by the CDFW or USFW informal coordination will be performed to avoid these impacts.

Further, any impacts to protected species from the discharges authorized pursuant to the General Order will be similar to those from other existing authorized discharge options.

Adoption of the General Order will not have a substantial adverse effect on riparian habitats or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFW service areas. Also see the response to item (a) above regarding General Order limits on discharges.

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. Any discharge to surface water (both waters of the United States and non-federal surface waters) is required to comply with the more stringent NPDES requirements in the General Order. Discharges to sensitive non-federal surface waters such as vernal pools and/or wetlands is prohibited by the General Order.

Discharges to wetlands or vernal pools are prohibited by the General Order. Discharges to land are unlikely to impact federally protected wetlands. In addition, see the response to items (a and b) above.

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

Less than Significant Impact. Adoption of the General Order will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with the established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. This will be accomplished through avoidance measures in addition to the implementation of appropriate BMPs. In addition, see the response to items (a, b, and c) 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 natural gas facility. 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. Sensitive areas where discharges from hydrostatic testing and/or site dewatering will be performed will be screened by a qualified biologist before any work is performed. Screening involves an assessment of existing conditions and may include a query of species accounts records search using published literature

and data provided by the CNDDB field surveys, field evaluations, and biological resource monitoring. If there is the potential to have a substantial adverse effect on species identified as a candidate, sensitive, or special status species (protected species) in local or regional plans, policies, or regulation, or by the CDFW or USFW informal coordination will be undertaken to avoid these impacts. This will be accomplished through avoidance measures in addition to the implementation of appropriate BMPs. Further, any impacts to candidate, sensitive, or special status species from the discharges authorized pursuant to the General Order will be similar to those from other existing authorized discharge options. Adoption of the General Order will not conflict with the provisions of adopted plans.

3.4.5 *Cultural Resources*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA 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?	☐	☒	☐	☐

DISCUSSION

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

Less than Significant with Mitigation. Adoption of the General Order may result in projects implemented in areas with historical resource significance as defined in CEQA section 15064.5. Because the location of projects is unknown at the time of the General Order adoption, it is impossible to determine that impacts would not occur. However, this evaluation addresses existing natural gas facilities for which cultural resource evaluation has likely previously occurred. In addition, because existing natural gas facilities have

been previously excavated unknown cultural resources are less likely to exist. New natural gas facility construction will be subject to project-specific CEQA analysis.

Prior to project implementation, a review of project-specific site conditions will be performed at a California Historical Resources Information System (CHRIS) information center. A registered professional archaeologist or environmental consulting firm qualified under the CHRIS qualification requirements shall perform the initial screening to determine if cultural resources are likely to exist at the project area. Some areas may be determined to be sensitive sites; avoidance is recommended when possible. Some sites may have ceremonial dates that may conflict with proposed industry schedules; rescheduling is recommended when possible. To identify the potential for such conflicts notification of Native American tribes will be performed before project initiation; the Native American Heritage Commission will be used to identify tribes to be notified.

Each project will be evaluated before field activities are performed. If a CHRIS records search indicates that the cultural sensitivity of a project area is unknown, cultural resource field surveys will be conducted. If an area is identified as sensitive for cultural resources, implementation of the project may require construction phase monitoring practices including resource evaluations and/or data recovery.

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

Implementation of the mitigation measures and compliance with state law will reduce potential impacts to less than significant with mitigation.

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

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

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

Less than Significant with Mitigation. See the response to item (a) above. The following additional practices will further reduce the potential impact of inadvertent discoveries. Adoption of the General Order will not have a substantial adverse effect on human remains. However, specific projects seeking coverage under the General Order

may have the potential to encounter human remains during construction activities. Upon discovery of human remains, project proponents will need to comply with Health and Safety Code section 7050.5 and Public Resources Code section 5097.98. The following actions will taken immediately upon the discovery of human remains:

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

If the descendent does not make recommendations within 48-hours, the owner shall reinter the remains in an area of the property secure from further disturbance, or if the landowner does not accept the descendant's recommendations, the owner or the descendent may request mediation by the Native American Heritage Commission. If mediation fails, the landowner shall reinter the human remains with appropriate dignity on the property in a location not subject to future subsurface disturbance.

Implementation of the mitigation measures and compliance with state law will reduce potential impacts to less than significant with mitigation.

3.4.6 *Geology / Soils*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to division of Mines and Geology Special Publication 42?	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

DISCUSSION

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to division of Mines and Geology Special Publication 42.

Less than Significant Impact. Adoption of the General Order will not have a substantial adverse effect caused by geologic or soil conditions. Any trenching or excavations will be shored so the exposure to people or structures from seismic related events is reduced. Earthwork activities will be supervised by a registered civil engineer, geotechnical engineer, or OSHA qualified excavation competent person. Aside from trailers mobilized to the site to house project management documents, there are no occupied structures associated with natural gas facility hydrostatic tests. Therefore, substantial adverse effects including risk of loss, injury, or death are

unlikely. A project specific CEQA evaluation will be performed for new or expanding natural gas facility systems seeking coverage under the General Order; the issue of geologic or soils hazards will be evaluated on a site-specific basis at that time. In addition, the siting criteria of the local agencies will establish appropriate locations and seek to avoid or minimize, on a site-specific basis, any potential for risk to people or structures. The General Order will have a less than significant impact to exposure of people or structures to potential adverse effects, including the risk of loss, injury, or death associated with earthquake faults.

ii) Strong seismic ground shaking?

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

iii) Seismic-related ground failure, including liquefaction?

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

iv) Landslides?

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

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

Less than Significant Impact. Construction, operations, and maintenance activities for Natural gas facilities are often subject to the construction storm water permitting requirements. The disturbed areas will be managed to prevent turbid storm water runoff. In addition, erosion is unlikely to occur due to the limited areal extent of the disturbed areas, storm water falling on the surrounding area is typically diverted around the disturbed areas, and storm water best management practices will be required and implemented. After the discharges associated with construction, operations, and maintenance activities is completed, the sites will be restored to their previous conditions, including revegetation as needed. Any discharges of wastewater and/or water generated from site dewatering to surface water (both waters of the United States and non-federal surface waters) will be required to comply with the stringent requirements for discharges to waters of the United States.

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

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

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

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

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

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

Less than Significant Impact. Installation of septic tanks is not part of natural gas facility tests. Portable toilets and sanitation facilities will be provided for workers and visitors to the testing sites when necessary.

3.4.7 *Greenhouse Gas Emissions*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VI. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
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. Discharges associated with natural gas facility construction, operations, and maintenance activities involves the use of heavy equipment for hauling, excavation, etc. However, the construction phase is of limited duration; therefore, it would not create a significant impact on the environment. Natural gas facility testing is performed to determine the condition of the equipment being tested and would not increase area population or traffic.

Discharges associated with construction, operations, and maintenance activities of existing natural gas facilities does not increase greenhouse gas emissions (GHG). Repairs of equipment, if leaks are found, will reduce greenhouse gas emissions. The primary gasses of concern produced are carbon dioxide (CO_2) and methane (CH_4). Consumers of natural gas pay based on usage, they are incentivized to employ efficient practices wherever possible. Because natural gas is composed primarily of CH_4, maintenance and repair of natural gas facilities will result in reduced emissions of CH_4.

Currently, most air basins in California are in non-attainment for ozone (i.e., the standard was violated during the latest three-year period), and only a small portion of the Mojave Desert Air Basin (in San Bernardino County) is in non-attainment for hydrogen sulfide (H_2S) emissions (California Air Resources Board [CARB], 2012). Although CH_4 is acknowledged to be a GHG and a significant contributor to climate change, it is not a criteria pollutant regulated by air basins in California.

Although testing natural gas facilities contributes a small amount of GHGs, the General Order will not affect the number of tests performed. Many of these tests are already covered by Regional Water Board waste discharge requirements, waivers of waste discharge requirements, or general orders. The General Order will not contribute to cumulative air quality impacts. Other sources of air emissions, such as transportation, industrial activities, and power generation, are the major contributors to significant cumulative air quality impacts. A project-specific CEQA evaluation will be performed for new or expanding natural gas facility systems seeking coverage under the General Order; the issue of greenhouse gas generation will be evaluated on a site-specific basis at that time.

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

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

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

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

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

3.4.8 *Hazard & Hazardous Materials*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐	☐	☒	☐

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
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?	☐	☐	☒	☐

DISCUSSION

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

Less than Significant Impact. Adoption of the General Order will not have the potential to create hazards or hazardous materials, or create a significant hazard to the public or the environment through routine transport use, or disposal of hazardous materials. Testing the condition of natural gas facilities will allow operators to perform repairs as needed and therefore reduce the risk of hazards.

It is anticipated that most natural gas facility testing sites will not store hazardous materials. Removal of natural gas condensate will be performed before a test begins. Some natural gas facility segments may contain PCBs. The PCBs may exist either as dissolved constituents in the natural gas condensate, hydrostatic test water, or dissolved in oil floating on the test water. In either case, the test water must be chemically characterized and proper disposal determined before discharge occurs. Local authorities may limit the volume and means of on-site storage for chemicals such as gasoline to fuel construction equipment.

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

Hazardous materials are defined and regulated under several federal and state statutes and associated regulations. The General Order does not change any regulations pertaining to hazardous materials. The General Order will have less than significant impact to the public or the environment through the routine transport, use, or disposal of hazardous materials.

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

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

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

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

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

Less than Significant Impact. The General Order will require determination of the presence of hazardous materials sites for projects where site dewatering is required. If site dewatering will occur within 250 feet of a hazardous material release site, a hydrogeologic evaluation is required to determine if the dewatering activities will significantly affect conditions at the release site. Significant effects include causing loss of hydraulic control of a plume under remediation, lowering the groundwater table when floating non-aqueous phase liquid (e.g., gasoline) is present, or migration of an existing plume. When a hydrogeologic evaluation is required, consultation with the State Water Board and/or Regional Water Board is required. Additional analysis of dewatering activities, testing, and treatment of extracted water may be required. Dewatering an excavation to remove storm water that has flowed into the excavation via the surface, or to remove water that resulted from a broken pipe (potable water, sewage, recycled water, or storm drain) is exempt from the consultation requirement. Determination of the

presence of hazardous material release sites shall be made using the State Water Board's GeoTracker system, available at: <http://geotracker.waterboards.ca.gov/>. The General Order will have less than significant impact to the public or the environment due to nearby hazardous waste sites.

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. Natural gas facilities 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 natural gas facilities covered by the General Order create any new significant fire risk within wildland areas.

3.4.9 *Hydrology / Water Quality*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
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 storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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	☐	☐	☒	☐

DISCUSSION

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

Less than Significant Impact. Adoption of the General Order will not violate any water quality standards or waste discharge requirements. The General Order will be implemented by the State Water Board and/or Regional Water Board and compliance with the appropriate Basin Plan is required. The General Order requires a discharger seeking enrollment to comply with best practicable treatment or controls (BPTC) and perform additional wastewater treatment based on chemical analysis of the wastewater. In addition, when recycled water is used for hydrostatic testing, use of the water must comply with the requirements of Title 22. Monitoring provisions included in the General Order will allow evaluation of compliance with the General Order.

If site dewatering occurs in close proximity to groundwater contaminant plumes, consultation with the State Water Board and Regional Water Board is required. Additional treatment and testing will be required as appropriate. (See Initial Study Section 8, Hazards and Hazardous Materials, Item d.)

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

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

In some cases, the source water for a hydrostatic test will be groundwater; therefore, using groundwater for a hydrostatic test has the potential to affect the groundwater supply in the short term. However, the amount of water needed and the duration of use is limited; therefore the tests are unlikely to have a significant impact on water supply. It is anticipated that wastewater will often be applied to land for various purposes (dust control, irrigation, etc.). A portion of that applied water may percolate into the subsurface. It may also supply water to irrigation or construction uses that would have otherwise relied upon other sources. This use of wastewater in place of other water supplies will reduce the demand on those water supplies. A less than significant impact to groundwater recharge is anticipated as a result of adoption of the General Order.

For those projects that require site dewatering, the impact is expected to be small. Typically the first saturated interval is dewatered and that water is normally applied in close proximity, thereby recharging the shallow aquifer.

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

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

Less than Significant Impact. Natural gas facility construction, operations, and maintenance activities are not typically performed in drainage areas that would require changing the course of a stream or river. Construction activity will be performed consistent with a construction storm water permit to minimize erosion and siltation issues.

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

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

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

Less than Significant Impact. Natural gas facility discharges associated with construction, operations, and maintenance activities will require construction activity and equipment storage areas. Often, the activities are subject to the storm water construction permit and therefore will implement BMPs to minimize storm water quality impacts. In cases where wastewater will be applied to land, it is reasonable to expect that storm water will be applied to land to maximize infiltration before storm water is allowed to discharge off-site.

f) Otherwise substantially degrade water quality?

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

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

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

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

Less than Significant Impact. The General Order covers discharges associated with construction, operations, and maintenance activities of natural gas facilities and does not address the construction of new housing or other major structures. Natural gas facility systems covered by the General Order might be constructed within 100-year flood hazard areas; however, they would typically not include large above-ground structures that would impede or redirect flood flows within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary Map, Flood Insurance Rate Map, or other flood hazard delineation map.

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

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

Less than Significant Impact. Adoption of the General Order is not expected to expose people or structures to a significant risk involving flooding. Some natural gas facilities will be located in areas protected by a levee or dam. However, natural gas facilities are constructed beneath such features under the direction of licensed civil and/or geotechnical engineers. The presence of natural gas facility equipment does not increase the risk of levee or dam failure.

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

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

Less than Significant Impact. The General Order does not address local zoning, which determines acceptable facility locations.

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

3.4.10 *Land Use / Planning*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☒	☐
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?	☐	☐	☒	☐

DISCUSSION

a) Physically divide an established community?

Less than Significant Impact. The General Order addresses natural gas facility systems, which is generally considered a necessary service for existing or planned and permitted communities. A project specific CEQA evaluation will be performed for new or expanding natural gas facility systems seeking coverage under the General Order; any issues, such as placement of a new or expanding system that physically divide an established community, will be evaluated on a site-specific basis at that time. However, natural gas facilities are typically located below ground and therefore do not act as physical barriers for communities. Furthermore, the General Order is unlikely to conflict with another agency's plan, and does not address zoning or land use designations.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan,

local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

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

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

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

3.4.11 *Mineral Resources*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☒	☐

DISCUSSION

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

Less than Significant Impact. Adoption of the General Order is not expected to impact the availability of a known mineral resource. The General Order addresses discharges associated with construction, operations, and maintenance activities of natural gas facility systems; therefore, impacts will consist of facilities of limited areal extent. Based on the small size of the areas impacted, a substantial adverse effect on mineral resources is unlikely. A project specific CEQA evaluation will be performed for new or expanding

natural gas systems seeking coverage under the General Order; mineral resource issues will be evaluated on a site-specific basis at that time.

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

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

3.4.12 *Noise*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
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?	☐	☐	☒	☐

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. Discharges associated with construction, operations, and maintenance activities from natural gas facilities will generate noise consistent with the activity. Material delivery and/or earth moving equipment typically involve use of diesel engines. However, the noise is generally limited to daylight hours and occurs over relatively short periods during the activity. The duration of construction activity varies with the size of the hydrostatic test, from a few weeks to a few months for a larger test.

Much of the activity does not typically generate significant noise. Some activities such as pumping groundwater, hydrostatic test water, or other mechanical component operations are powered by electrical motors that produce a low level of noise when operating. Large hydrostatic tests will typically require more equipment and therefore occupy a large footprint so much of the noise that is generated is attenuated by distance at the facility boundary. At the conclusion of the hydrostatic test, there are no ongoing service events that might generate noise.

Hydrostatic tests located in remote areas may rely upon electrical generators to power electrical equipment. Because they are remote and not served by electrical service, few people are likely to be affected. Tests performed in populated areas will have electrical service and therefore will not have to use generators to produce electricity.

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

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

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

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

Less than Significant Impact. Natural gas facility equipment is typically located below ground and do not typically require on-gong service. No permanent increase in ambient noise levels is anticipated.

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 (d) above.

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

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

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

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

3.4.13 *Population / Housing*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
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?	☐	☐	☒	☐

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 natural gas facility systems that would be constructed in the future; therefore, the General Order is unlikely to induce substantial population growth. Typically, construction of new or expansion of existing natural gas facility systems takes place as a response to accompany population growth. The General Order does not change zoning or land use designation which would be required prior to the addition of homes, businesses, roads

and infrastructure. Such changes would require entitlements from local land use authorities.

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

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

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

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

3.4.14 *Public Services*

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

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

3.4.15 *Recreation*

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

DISCUSSION

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

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

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

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

3.4.16 *Transportation / Traffic*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC: Would the project:				
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) Exceed, individually or cumulatively conflict with an applicable congestion management program, including, but not limited to level of service (LOS) standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
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?	☐	☐	☒	☐

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

DISCUSSION

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

Less than Significant Impact. The implementation of the General Order will not conflict with an applicable plan, ordinance, or policy related to transportation. Discharges associated with construction, operations, and maintenance activities of new or expanding natural gas facilities may have a short-term impact on traffic, for mobilization of construction equipment and materials to and from the sites. Long term operation of a natural gas facility will have a negligible impact on transportation and is not a significant trip generating activity. Adoption of the General Order is not expected to conflict with a transportation related ordinance. A project specific CEQA evaluation will be performed for new or expanding natural gas facility systems seeking coverage under the General Order; the issue of traffic/transportation plan, ordinance, policies, and effectiveness of the performance of the circulation system will be evaluated on a site-specific basis at that time. The General Order itself will have less than significant impact on transportation related ordinances or policies.

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

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

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

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

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

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

e) Result in inadequate emergency access?

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

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

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

3.4.17 *Tribal Cultural Resources*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, 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, and that is:				
a) 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	☐	☒	☐	☐
b) 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

DISCUSSION

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, 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, and that is 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 with Mitigation. Adoption of the General Order may result in projects implemented in areas with tribal cultural resource significance as defined in Public Resources Code section 21074. Because the location of projects is unknown at the time of the General Order adoption, it is impossible to determine that impacts would not occur. However, this evaluation addresses existing natural gas facilities for which tribal cultural resource evaluation has likely previously occurred because existing natural gas facilities have been previously excavated. New natural gas facility construction will be subject to project-specific CEQA analysis.

Some areas may be determined to be sensitive sites; avoidance is recommended when possible. Some sites may have ceremonial dates that may conflict with proposed industry schedules; rescheduling is recommended when possible. To identify the potential for such conflicts notification of Native American tribes who have opted in to be notified will be performed before project initiation; the Native American Heritage Commission will be used to identify tribes to be notified.

Each project will be evaluated before field activities are performed and as applicable implement site-specific cultural resource avoidance and minimization measures, including best management practices, to be implemented at the discharge site.

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

Implementation of the mitigation measures and compliance with state law will reduce potential impacts to less than significant with mitigation.

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, 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, and that is 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

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

3.4.18 *Utilities / Service Systems*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVIII. UTILITIES AND SERVICE SYSTEMS: 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 storm water 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?	☐	☐	☒	☐

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

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 State Water Board and/or Regional Water Boards, establishes the minimum acceptable treatment, and sets effluent limits.

Adoption of the General Order will not cause wastewater to exceed (be worse than) requirements of a Regional Water Board. If wastewater is discharged to a community collection system, that activity will be permitted by the wastewater treatment facility consistent with wastewater treatment requirements issued by the Regional Water Board for the facility. A project specific CEQA evaluation will be performed for new or expanding natural gas facilities seeking coverage under the General Order; individual wastewater treatment requirements will be evaluated on a site-specific basis at that time.

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

Less than Significant Impact. Dischargers seeking coverage under the General Order may be required to treat wastewater if needed based on the chemical characterization. Such treatment would be performed on-site using modular equipment (e.g., granular activated carbon, filter media, separation tanks, etc.). Because the discharge of hydrostatic test wastewater is limited to the test event, no new permanent wastewater treatment facilities will be required. Adoption of the General Order will not result in construction or expansion of permanent water or wastewater treatment facilities.

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

Less than Significant Impact. At some locations where discharges associated with construction, operations, and maintenance activities occur and depending upon the season, temporary storm water retention ponds may be constructed as a storm water BMP. However, those temporary measures will be removed as part of site restoration activities. Adoption of the General Order is not expected to result in significant construction or expansion of storm water drainage facilities. Storm water drainage facilities are generally not necessary for natural gas facility equipment located below

ground. A project specific CEQA evaluation will be performed for new or expanding natural gas facilities seeking coverage under the General Order; potential environmental impacts of new or expanding storm water drainage facilities will be evaluated on a site-specific basis at that time.

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

Less than Significant Impact. The General Order will not require new or expanded water supply entitlements. Aside from the water needed to perform the hydrostatic test, natural gas facilities do not create a demand on water supplies. The General Order will not change the water supply needs or require new or expanded entitlements. Water supply use would be incidental to existing or planned and permitted uses which the natural gas facility would serve. A project specific CEQA evaluation will be performed for new or expanding natural gas facilities seeking coverage under the General Order; water supply needs and necessity for new or expanded entitlements will be evaluated on a site-specific basis at that time.

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

Less than Significant Impact. The General Order contains wastewater effluent limits and land application requirements that dischargers must comply with. There is no on-going need for wastewater treatment capacity as a result of natural gas facilities.

Chemical toilets and sanitation facilities are provided for use by construction personnel and site visitors. The toilets are regularly serviced by the equipment supplier as needed. The waste is typically disposed of at a local wastewater system. If the wastewater system were unable to accommodate the chemical waste, the service provider would have to haul it to another facility.

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

Less than Significant Impact. Discharges associated with construction, operations, and maintenance activities of natural gas facilities typically do not generate significant amounts of solid waste to the extent that it would become a landfill capacity issue. Large items such as broken concrete or asphalt paving are typically recycled and not landfilled. A project specific CEQA evaluation will be performed for new or expanding natural gas facility systems seeking coverage under the General Order; the potential for landfill capacity effects will be evaluated on a site-specific basis at that time. The General Order itself will result in less than significant impact to the capacity of landfill facilities.

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

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

3.4.19 *Mandatory Findings of Significance*

ENVIRONMENTAL FACTOR	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGNIFICANCE.:				
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, 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?	☐	☒	☐	☐

PRELIMINARY STAFF DETERMINATION

☐ The proposed project COULD NOT have a significant effect on the environment, and, therefore no alternatives or mitigation measures are proposed.

☒ The proposed project MAY have a significant or potentially significant effect on the environment, and therefore alternatives and mitigation measures have been evaluated.

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

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The State Water Board's analysis found that significant impacts on the environment can be avoided through implementation of mitigation measures described herein. The mitigation measures are based upon comments received by responsible and trustee agencies during the initial consultation process. Comments received on cultural resources were received from a Native American tribe as part of an AB 52 tribal cultural resource consultation offer. The mitigation measures consist of the following:

Table 5 Summary of Significant Impacts and Mitigation Measures

Commenter	Comment Summary	Response
California Department of Fish and Wildlife	a. Inundation of terrestrial habitats occupied by special status wildlife and plant species (including state and federally listed species) could result in habitat degradation or disturbance of breeding, feeding or sheltering activities resulting in injury, mortality, or reduced reproductive success. b. Increased sedimentation into streams or lakes occupied by special status aquatic species, erosion of stream banks and stream bottoms, resulting in a temporary increase of sediment load and habitat destruction. c. Discharges to water could result in changes in water temperature, dissolved oxygen levels, or increased downstream flows potentially adversely impacting special status aquatic species.	Initial Study sections 3.4.4(a) and (b).
California Coastal Commission	a. For pipeline failures, recovery to the maximum extent feasible any leaked PCB containing liquid and proper disposal.	Initial Study sections 3.4.4(a), 3.4.4(b), and Section 2.1 and Table 4 addressing TSCA requirements.

Commenter	Comment Summary	Response
	b. Revegetation with native plant species appropriate to the local area.	U.S.EPA regulates the use, storage, cleanup, and disposal of PCBs under 40 C.F.R. part 761, implementing the TSCA provisions for PCBs. This General Order does not supersede any regulatory requirements of 40 C.F.R. part 761 applicable to natural gas pipelines including cleanup or disposal of PCB wastes due to releases of liquids from natural gas pipeline systems.
Native American tribal cultural resource consultation	a. A potential for impacting cultural resources, both on traditional tribal lands and at areas that have cultural significance located off traditional tribal lands exists. There may be instances where cultural resources that were previously unknown are discovered	Initial Study sections 3.4.5(a – d) and 3.4.17(a - d)

DETERMINATION:

On the basis of this initial evaluation:

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

Prepared by:	
Signature: Original Signed by Timothy O'Brien for Jagroop Khela	Date: 12/8/2017
Printed Name: Jagroop Khela	

Reviewed by:	
Signature: Original Signed by Timothy O'Brien	Date: 12/8/2017
Printed Name: Timothy O'Brien	

Approved by:	
Signature: Original Signed By Shahla Farahnak for Karen Larsen	Date: 12/8/2017
Printed Name: Karen Larsen	

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DETERMINATION:

On the basis of this initial evaluation:

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

Prepared by:	
Signature:	Date: 12/8/17
Printed Name: Jagroop Khela	

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Signature:	Date: 12/8/17
Printed Name: Timothy O'Brien	

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