Meeting Date: 08/17/23
Lease/Application Number: 5438-B/A2562
Staff: M. Schroeder

Staff Report 12

LESSEE/APPLICANT:

Pacific Gas and Electric Company

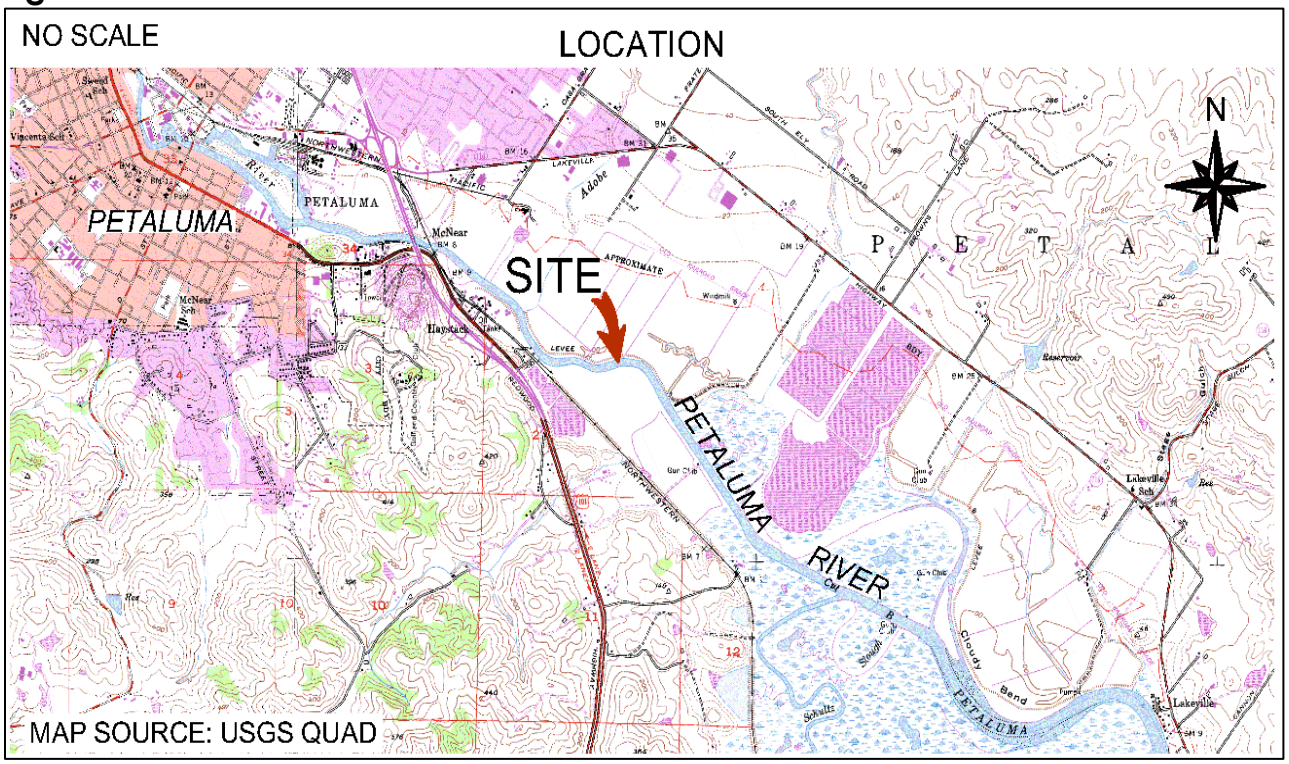
PROPOSED ACTION:

Consider Amendment of a General Lease – Right-of-Way Use, Adoption of a Mitigated Negative Declaration, and Issuance of a General Lease – Right-of-Way Use.

AREA, LAND TYPE, AND LOCATION:

Sovereign land in the Petaluma River, adjacent to 3393 Petaluma Boulevard South, near Petaluma, Sonoma County (as shown in Figure 1).

Figure 1. Location



PROPOSED AMENDMENT OF LEASE 5438-B:

- Authorize removal of the two existing parallel 12-inch-diameter natural gas pipelines in the Petaluma River from Lease 5438-B, a General Lease – Right-of-Way Use.

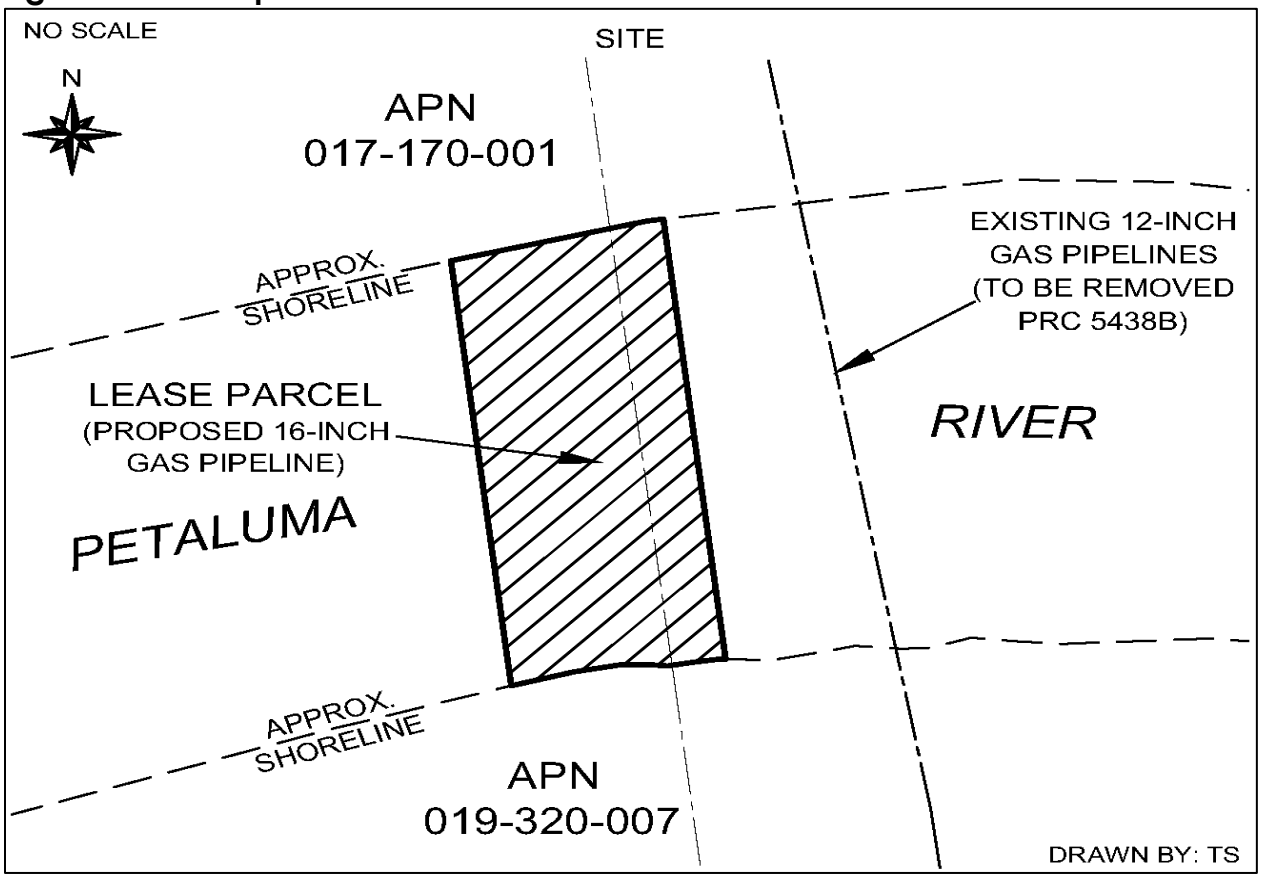
All other terms and conditions of the lease will remain in effect without amendment.

PROPOSED ISSUANCE OF NEW GENERAL LEASE - RIGHT-OF-WAY USE:

AUTHORIZED USE:

Installation and use of a 16-inch-diameter steel Horizontal Directionally Drilled pipeline to transport natural gas; and decommissioning and removal of two existing parallel 12-inch-diameter gas pipelines (as shown in Figure 2).

Figure 2. Site Map



NOTE: This depiction of the lease premises is based on unverified information provided by the Applicant or other parties and is not a waiver or limitation of any State interest in the subject or any other property.

TERM:
20 years, beginning August 17, 2023.

CONSIDERATION:
$503 per year, with an annual Consumer Price Index adjustment as provided for in the lease.

SPECIFIC LEASE PROVISIONS:
- Lessor and Lessee agree that Lessee may self-insure for General Liability coverage of no less than $10,000,000 per occurrence.
- A bond in an amount no less than $30,000.
- Lessee shall submit a final set of engineering design drawings as issued for construction prior to undertaking the entire project.
- Lessee shall submit "as-built" plans following project completion.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:
Public Resources Code sections 6005, 6216, 6301, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:
On January 26, 2012, the Commission authorized termination of a holdover tenancy of Lease No. PRC 5438 and authorized issuance of six General Leases – Right-of-Way Use, Lease Nos. PRC 5438-A, PRC 5438-B, PRC 5438-C, PRC 5438-D, PRC 5438-E, and PRC 5438-F in its place (Item C33, January 26, 2012). Lease No. PRC 5438-B authorized 39 existing natural gas pipelines in various waterways and various counties. The lease expires December 31, 2031.

The Applicant is now applying to decommission and remove two existing parallel 12-inch-diameter natural gas pipelines from the Petaluma River (L-021G and L-021G-10) and to install a horizontal directionally drilled (HDD) natural gas pipeline (L-021G) under the Petaluma River. The two existing gas pipelines are currently authorized under Lease No. PRC 5438-B. Upon routine inspection of the existing lines (installed in 1960), the Applicant determined removal and replacement of the lines was necessary to ensure reliable service and to protect the health and safety of the public.

Staff recommends amendment of Lease No. PRC 5438-B to remove the two existing pipelines from the lease, and issuance of a new lease for the proposed new HDD pipeline.

The proposed line would consist of a 16-inch-diameter steel natural gas pipeline installed through HDD construction methods and would tie into the existing pipeline network. The proposed replacement line would be located approximately 72 feet below the bottom of the Petaluma River. The two existing parallel 12-inch-diameter lines are buried approximately 6 to 8 feet beneath the riverbed. Installation of the new pipeline at a much greater depth would maintain public safety and would not impact navigability of the Petaluma River.

The new pipeline would be installed with a proposed HDD entry point located near Petaluma Boulevard South. The equipment staging areas would be located within Shollenberger Park on the north side of the river and on privately held land on the south side of the river requiring temporary construction easements. The new pipeline would better ensure the safe transport of needed energy resources. Upon completion of the pipeline replacement, the existing active pipelines would be decommissioned and removed in their entirety from the lease premises.

Removal of the pipelines would occur through cutting the lines at a location on the upland on both sides of the river landward of the Commission's jurisdiction. Thereafter, dredging of the river bottom would occur to expose the pipes. Removal of the pipes would be with a barge-mounted crane. The removed pipes would be disposed of at an approved upland facility. The Lessee will also remove valve lots, condensate trap, and dripline valves located on both sides of the river. The existing pipeline markers would be removed and replaced with new pipeline markers to indicate the proposed pipeline realignment.

Upon completion of installation and operation of the new pipeline, periodic inspection results, including internal inspections and pressure tests will be required as part of the lease. The project, which is anticipated to occur over two phases throughout a 5-month period, is necessary for the Lessee to provide reliable public utility service.

The proposed lease does not alienate the State's fee simple interest or permanently impair public rights. In addition, the lease has a limited 20-year term and does not grant the lessee exclusive rights to the lease premises. The new pipeline will be located deep below the bed of the river and will have no impact on the recreational use of the Petaluma River.

The proposed lease requires the lessee to insure the lease premises and indemnify the State for any liability incurred as a result of the lessee's activities thereon. The

lease also requires the payment of annual rent to compensate the people of the State for the occupation of public land.

CALIFORNIA ENVIRONMENTAL QUALITY ACT:

The Commission is the lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) and conducted an Initial Study to determine if the Project may have a significant effect on the environment (State CEQA Guidelines, § 15063). The Initial Study identified several potentially significant impacts to: Air Quality; Biological Resources; Cultural Resources; Cultural Resources – Tribal; Geology, Soils, and Paleontological Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Recreation; Transportation; and Wildfire. However, mitigation measures were proposed and agreed to by the Applicant prior to public review that would avoid or mitigate the identified potentially significant impacts "to a point where clearly no significant effects would occur" (State CEQA Guidelines, § 15070, subd. (b)(1)). Consequently, the Initial Study concluded that "there is no substantial evidence, in light of the whole record before the agency, that the Project as revised may have a significant effect on the environment" (State CEQA Guidelines, § 15070, subd. (b)(2)), and a Mitigated Negative Declaration (MND) was prepared.

Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15025), staff prepared an MND identified as CSLC MND No. 811, State Clearinghouse No. 2023060440. The Proposed MND and Initial Study were circulated for a 30-day public review period from June 15, 2023, to July 17, 2023, and staff received two comment letters; one letter from a local agency (City of Petaluma [City]) and one letter from a State agency (California Department of Fish and Wildlife [CDFW]). Exhibit A provides a summary of the comments and responses to these agencies.

In response to the comments by the City and CDFW, Commission staff revised the MND by including modifications to text and changes to some mitigation measures as required by CDFW. Staff determined that these changes do not constitute a "substantial revision," as defined in State CEQA Guidelines section 15073.5, subdivision (b), and that recirculation of the MND prior to Commission consideration is not required pursuant to in State CEQA Guidelines section 15073.5, subdivision (c).

Based upon the Initial Study, the MND, and the comments received in response, there is no substantial evidence that the Project will have a significant effect on the environment; California Code of Regulations, Title 14, section 15074, subdivision (b). A Mitigation Monitoring Program has been prepared in conformance with the provisions of CEQA (Pub. Resources Code, § 21081.6), and is contained in the attached Exhibit B.

CLIMATE CHANGE:

Climate change impacts, including sea level rise, more frequent and intense storm events, and increased flooding and erosion, affect both open coastal areas and inland waterways in California. The facilities are located on the Petaluma River, in a tidally influenced site vulnerable to flooding at current sea levels and at a higher risk of flood exposure given projected scenarios of sea level rise.

The California Ocean Protection Council updated the *State of California Sea-Level Rise Guidance* in 2018 to provide a synthesis of the best available science on projections and rates of sea level rise. CSLC staff evaluated the "high emissions," "medium-high risk aversion" scenario to apply a conservative approach based on both current emissions trajectories and the lease location. The Point Reyes tide gauge was used for the projected sea level rise scenario (Table 1).

Table 1. Projected Sea Level Rise for Point Reyes[1]

Year	Projection (feet)
2030	0.8
2040	1.3
2050	2.0
2100	7.0

Source: Table 10, State of California Sea-Level Rise Guidance: 2018 Update
Note: [1] Projections are with respect to a 1991 to 2009 baseline.

This effect could increase Petaluma River's inundation levels within the lease area. In addition, as stated in *Safeguarding California Plan: 2018 Update* (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding, fire, drought, extreme heat, and storms (especially when coupled with sea level rise). In rivers and tidally influenced waterways, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris as well as decreased bank stability and structure. Conversely, climate change induced droughts could decrease river levels and flow for extended periods of time. Climate change and sea level rise will further influence riverine areas by changing erosion and sedimentation rates. Flooding and storm flow, as well as runoff, will likely increase scour and decrease bank stability at a faster rate.

Under existing conditions, the current depth of the existing steel natural gas pipelines is 6 to 8 feet below the bed of the Petaluma River. With implementation of the Project, the replacement pipeline would be at a depth of approximately 72 feet below the bed of the river, which is expected to improve conditions for maintenance dredging and navigability of the Petaluma River. The upland portions of the Project site are located within parcels protected by engineered levees and

berms lining the Petaluma River and would not be subject to inundation under the 0.8-foot and 2.0-foot sea level rise scenarios (except during a 100-year storm surge). The parcel within which the southern work area would be located could be subject to inundation under the 2.0-foot sea level rise scenario during a 100-year storm surge and could be regularly inundated to a depth of 2 feet beginning with a 3.0-foot sea level rise scenario (Adapting to Rising Tides 2022). This is not anticipated to occur until approximately 2070 under the emissions scenario described above; this inundation would not adversely affect the Project, as the replacement subsurface natural gas pipeline would be at a substantially greater depth below the riverbed than under existing conditions.

California, and the world, is in the midst of the climate crisis, caused in large part by carbon emissions from the production of fossil fuels and their subsequent use. According to the State's Fourth Climate Change Assessment (Governor's Office of Planning and Research 2018), climate change is making extreme conditions in California more frequent and severe. For example, there were 4.2 million acres of land burned in wildfires in California in 2020, more than the previous four years combined, and 2022 is currently the driest year on record (CAL FIRE 2021; National Integrated Drought Information System 2022). Average annual temperatures are on the rise in California, and if greenhouse gas emissions are not lowered substantially, air temperatures could increase by an average of 5.8°F by 2050 and 8.8°F by 2100 (California Natural Resources Agency 2022). These impacts endanger natural resources and public health.

The most effective way to prevent the worst impacts of the climate crisis is to reduce greenhouse gas emissions by transitioning the state's energy portfolio from fossil fuels to renewable, non-emitting sources such as solar, wind, and geothermal. The state is already on its way, securing 33 percent of its energy from renewable sources in 2020 (California Energy Commission 2021). In 2018, the state legislature passed SB 100 (De León; Chapter 312, Statutes of 2018), mandating that at least 60 percent of California's energy comes from renewable, zero-carbon sources by 2030, and 100 percent by 2045. The primary action to achieve these targets is to eliminate the use and physical presence of fossil fuels in the state, including natural gas[1]. The pipeline system provides natural gas to the city of Petaluma. Methane leaks are the most common emission from the transportation of natural gas through

[1] There are many additional ongoing and planned actions that have to co-occur in order to achieve these goals and reduce harms to the people and natural resources of California. These include increasing energy efficiency, transforming the electrical grid to have more load flexibility, decarbonizing buildings, and electrifying the transportation sector. Learn more in the 2021 SB100 Joint Agency Summary Report.

pipelines. Methane is the primary contributor to the formation of ground-level ozone, a hazardous air pollutant and greenhouse gas. It is also a major driver of global warming – it is 80 times more potent at warming the planet than carbon dioxide. In addition to atmospheric impacts, methane is highly flammable. The lease premises is located in Sonoma County in open lands with moderate to low vegetation fuels. The majority of the Counties are designated as experiencing 'Extreme Drought,' signifying a year-round wildfire season and extremely low reservoir levels (National Integrated Drought Information System 2022). The Applicant acknowledges the contribution of fugitive pipeline emissions to climate change and wildland fire risk. Regular pipeline inspections, as required by State and federal law and in compliance with the terms of the lease, will reduce the potential for methane leaks and associated atmospheric impacts.

Pursuant to the proposed lease, the Applicant acknowledges that the lease premises and adjacent upland are located in an area that may be subject to the effects of climate change, including sea level rise.

TRIBAL CONSULTATION

Under AB 52 (Chapter 532, Statutes of 2014), lead agencies must notify tribes of the opportunity to consult on a project if that Tribe has requested notification, and must avoid damaging tribal cultural resources, when feasible, whether consultation occurred or is required. For all lead agency projects, in addition to any required AB 52 notifications, Commission staff contacts the Native American Heritage Commission (NAHC) to obtain results of a sacred lands file search (the sacred lands file is a database maintained by the NAHC of culturally sensitive areas or resources) as well as a list of Native American representatives who may be able to provide information about resources of concern located within or adjacent to a project area.

On June 10, 2021, Commission staff contacted the NAHC requesting a search of the NAHC's Sacred Lands File and a list of Native American representatives who may have knowledge of tribal cultural resources in the Project area, or interest in the Project. The NAHC replied on June 16, 2021, stating that the Sacred Lands File has no record of sacred sites in the vicinity of the Project area. The NAHC response included a list of 11 Native American representatives from nine tribes who may have knowledge of tribal cultural resources in the Project area or may be interested in the Project. On August 2, 2021, Commission staff notified the nine tribes on the NAHC contact list to ensure those tribes would have an opportunity to provide meaningful input on the potential for Tribal cultural resources to be found in the proposed Project area and recommend steps to be taken to ensure adverse

impacts to Tribal cultural resources are avoided. The outreach letters were sent to chairpersons and representatives of the following Tribes:

- Federated Indians of Graton Rancheria (FIGR)
- Pinoleville Pomo Nation
- Guidiville Indian Rancheria
- Mishewal-Wappo Tribe of Alexander Valley
- Cloverdale Rancheria of Pomo Indians
- Middletown Rancheria
- Middletown Rancheria of Pomo Indians
- Dry Creek Rancheria of Pomo Indians
- Lytton Rancheria

Commission staff received a response from the FIGR on September 2, 2021, requesting formal consultation under AB52. Staff met with the FIGR Tribal Historic Preservation Officer (THPO), who requested a subsurface study. After consideration of archaeological sensitivity and logistics, the FIGR THPO agreed that cultural resources monitoring (during ground disturbance) was appropriate for the Project.

ENVIRONMENTAL JUSTICE:

Consistent with the Commission's Environmental Justice Policy, staff reviewed environmental justice data that indicated high pollution burdens to the surrounding communities. These burdens may result in impacts to health such as asthma, low birth weight, and cardiovascular disease. In addition, the same data showed groundwater threats. As part of an environmental justice outreach and engagement effort, staff contacted environmental justice organizations in Sonoma County on February 22, 2023, providing notification of the proposed lease and requesting input. The outreach included a brief description of the project and conveyed a desire to learn from the perspectives of the local community. Commission staff sent follow-up emails and phone calls to the environmental justice organizations. As of the posting of this staff report, no responses to the outreach letters have been received.

CONCLUSION:

For all the reasons above, staff believes that amendment of Lease No. PRC 5438-B and issuance of the proposed lease will not substantially impair the public rights to navigation, fishing, and commerce; or substantially interfere with Public Trust needs and values at this location, at this time, and for the foreseeable term of the lease; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects a use of sovereign land, it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law. The lessee has no right to a new lease or to renewal of any previous lease.

2. This action is consistent with the "Leading Climate Activism," "Meeting Evolving Public Trust Needs," "Prioritizing Social, Economic, and Environmental Justice," and "Partnering with Sovereign Tribal Governments and Communities" Strategic Focus Areas of the Commission's 2021-2025 Strategic Plan.

3. The Project includes submerged lands identified as possessing significant environmental values: The entire Petaluma River is listed within the Commission's Significant Lands Inventory, pursuant to Public Resources Code Section 6370 et seq. (CSLC 1975). The Petaluma River is in the Significant Lands Inventory as Parcel Number 21-095-000, which includes the submerged land in the Petaluma River within the ordinary high-water mark. The subject lands are classified in use category Class B, which authorizes limited use. Environmental values identified or these lands include geological, biological (wildlife spawning and support), scenic, archaeological and historical, and recreational values. Based on the staff's review of the Significant Lands Inventory, the CEQA analysis provided in this MND, and participation from the agency nominating such lands through the CEQA review and permitting process, the Project, as proposed, would not significantly affect those lands and is consistent with the use classification.

APPROVALS REQUIRED:

U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
California Department of Fish and Wildlife
San Francisco Bay Regional Water Quality Control Board
City of Petaluma
Sonoma County
San Francisco Bay Conservation and Development Commission

EXHIBITS:

A. Response to CEQA Comments
B. Mitigation Monitoring Program

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that the MND, CSLC MND No. 811, State Clearinghouse No. 2023060440 (~~July~~ August 2023), was prepared for this Project pursuant to the provisions of CEQA, that the Commission has reviewed and considered the information contained therein, and the comments received in response thereto, and that the MND reflects the Commission's independent judgment and analysis.

Adopt the MND and determine that the Project, as approved, will not have a significant effect on the environment.

Adopt the Mitigation Monitoring Program, as contained in Exhibit B, attached hereto.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that amendment of Lease Number PRC 5438-B and issuance of the proposed lease for installation of a natural gas pipeline and decommissioning and removal of two existing natural gas pipelines would not be materially adverse to public health and safety; or substantially interfere with the Public Trust needs and values at this location, at this time, and for the foreseeable term of the lease; and is in the best interests of the State.

SIGNIFICANT LANDS INVENTORY FINDING:

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

AUTHORIZATION:

1. Authorize amendment of Lease Number PRC 5438-B, a General Lease – Right-of-Way Use, of sovereign land located in the Petaluma River, effective August 17, 2023; to remove the two existing parallel 12-inch-diameter natural gas pipelines in the Petaluma River.

2. Authorize issuance of a General Lease – Right-of-Way Use to the Applicant beginning August 17, 2023, for a term of 20 years, for installation of a horizontal directionally drilled 16-inch-diameter natural gas pipeline; and the decommissioning and removal of two existing parallel 12-inch-diameter natural gas pipelines in the Petaluma River; annual rent in the amount of $503, with an annual Consumer Price Index adjustment; a bond in an amount no less than $30,000; and liability insurance or self-insurance in an amount no less than $10,000,000 per occurrence.

3. Authorize the Executive Officer or designee to replace Exhibits in the lease upon submission, review, and approval of as-built plans detailing the final location of the new improvement following construction.

EXHIBIT A – RESPONSE TO CEQA COMMENTS

PG&E GAS LINE 021G REPLACEMENT PROJECT ACROSS THE PETALUMA RIVER

INITIAL STUDY(IS)/MITIGATED NEGATIVE DECLARATION (MND) RESPONSE TO COMMENTS

City of Petaluma

Comment CITY-1. City Permit Requirements

Section 1.7.2 (Other Agencies) provides a list of permitting agencies and approvals/regulatory requirements anticipated. Table 1-1 notes that approval of an agreement for temporary closure and use of Shollenberger Park from the City of Petaluma will be required. We note the following approvals will also be required by the City of Petaluma:

- Lot Line Adjustment to establish a permanent easement for the new pipeline and a temporary easement for construction of the new pipeline.
- Special Discharge Permit for discharge of water to the sanitary sewer system (noted on page 2-9 of MND).
- Encroachment permit through Petaluma Public Works & Utilities to work within City right-of-way/public property which also includes final approval of trail restoration to pre-construction conditions.

The City recommends the MND be updated to include the above in approvals/regulatory requirements anticipated by the City of Petaluma.

COMMISSION RESPONSE TO COMMENT CITY-1

Table 1-1 has been revised to add the City's approvals as requested.

Comment PROJ-1. Project Description

It is understood that a portion of the existing pipeline will be removed and approximately 1,280 feet of pipeline and 2,540 feet of driplines in upland locations will be decommissioned and retired in place in a manner consistent with adopted PG&E policies. The City would like additional information to understand why some portions of existing infrastructure will be removed and others will remain in place.

The City recommends that the project description section of the MND be updated to provide a brief rationale for why portions of the existing pipeline and dripline will be decommissioned and retired in place as opposed to removed and disposed of.

COMMISSION RESPONSE TO COMMENT PROJ-1

Sections ES.1 and 2.0 have been revised to explain that the retired line would not conflict with current land use and leaving it in place would reduce the amount of excavation, work area, and project duration. The pipelines in the river will be removed because PG&E inspections determined that portions of the original subsurface pipeline and/or associated infrastructure beneath the Petaluma River could become damaged during periodic dredging activities conducted by the U.S. Army Corps of Engineers to improve conditions for navigability of the Petaluma River.

Biological Resources

Comment BIO-1

Section 3.4.2 (page 3-34) of the MND provides a discussion of the federal, state, and local regulatory setting related to biological resources that are relevant to the project. Section 3.4.2.2 discusses applicable City of Petaluma General Plan policies, however, no other local regulatory setting information is provided. Of particular relevance to the site and the project is the Shollenberger Marsh Management, Maintenance and Monitoring Plan (3M Plan) prepared by GHD, September 2014 which describes the management, maintenance, and monitoring plan for Shollenberger Marsh, establishes long-term management and habitat goals, identifies cost-effective methods to enhance or re-establish and maintain habitat for the salt marsh harvest mouse (SMHM), and evaluates opportunities to establish, protect, or enhance a SMHM habitat corridor along a portion of the Petaluma River near the Shollenberger Marsh.

The City recommends that the MND be updated to include a summary of the applicability of the 3M Plan.

COMMISSION RESPONSE TO COMMENT BIO-1

Section 3.4.2.3 has been revised to describe the 3M Plan and its applicability to the project. Because no dredged material is proposed to be disposed of in the Shollenberger Park as part of this project, the 3M Plan does not apply to the Project.

Comment BIO-2

Section 3.4.3.4 (Impact to Mammals) concludes that implementation of Mitigation Measures BIO-1 (Environmental Training Program), BIO-2 (Biological Monitoring), and BIO-7 (Protection of Terrestrial Marsh Species) will reduce impacts to less than significant. As shown in Figure 3 of the 3M Plan (referenced above), SMHM habitat is known to occur throughout Shollenberger Park, including along proposed access roads and adjacent to the dredge material disposal site. MM BIO-7 sets forth that "work areas within 200 feet of tidal marsh shall be bordered by temporary exclusion fencing."

The City recommends that the MND be updated to identify the total area of SMHM habitat impacted by project construction activities including modifications to access roads. Mitigation measures should be updated to ensure consistency with the 3M Plan, including but not limited to replacement of SMHM habitat at a 2:1 ratio, unless determined otherwise by a qualified biologist.

COMMISSION RESPONSE TO COMMENT BIO-2

MM BIO-7 has been revised to include that no Project activities shall occur within 50 feet of tidal marsh habitat within two hours before and after an extreme high tide event. In addition, MM BIO-7 now includes language for exclusion fencing. The 3M Plan applies to the City's past and future dredge disposal operations, and to meet its obligations under the biological opinion. Since no dredged material is proposed to be disposed in Shollenberger Park as part of this project, the 3M Plan does not apply to the project.

Comment BIO-3

Bullet 4 of Mitigation Measure BIO-8 requires PG&E to prepare a habitat restoration and monitoring plan for restoration of temporary wetland impacts, subject to review and approval by CSLC.

The City recommends that Bullet 4 of Mitigation Measure BIO-8 be updated to include a reference to the 3M Plan to ensure consistency. In addition, it is recommended that PG&E prepare the restoration plan in coordination with the Petaluma Wetlands Alliance (PWA), a local volunteer organization that is actively involved in management activities at Shollenberger Marsh. The mitigation measure should also be updated to require review and approval by the City of Petaluma Community Development Department, Planning Division, and the California Department of Fish and Wildlife.

COMMISSION RESPONSE TO COMMENT BIO-3

MM BIO-8 has been revised to require that the restoration plan be prepared in consultation with the Petaluma Wetlands Alliance, the City of Petaluma, and CDFW.

Comment BIO-4

Impact (f) related to impacts associated with a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan does not include a discussion of the 3M Plan.

The City recommends that the MND be updated to include a discussion of the project's consistency and/or conflict with the 3M Plan.

COMMISSION RESPONSE TO COMMENT BIO-4

Section 3.4.2.3 has been revised to describe the 3M Plan and its lack of applicability to the Project. No revisions to the impact conclusions are necessary.

Comment BIO-5

It is understood that permits from regulatory agencies (e.g., USACE, CDFW, RWQCB) will be required.

The City recommends that the Mitigation Measures in the MND be updated, as appropriate to state that permits acquired from the regulatory agencies will be provided to the City of Petaluma in advance of project construction activities.

COMMISSION RESPONSE TO COMMENT BIO-5

Although not required under CEQA, CSLC staff recommends PG&E continue consultation with the City of Petaluma and provide regulatory permits as requested. No changes to the mitigation measures were made.

Greenhouse Gas Emissions

Comment GHG-1

Section 2.2.2.2 (Phase 2) indicates that 44,000 cubic feet of natural gas will be released from the existing pipeline into the atmosphere prior to removal. Impact (b) includes a brief discussion of the project's consistency with the City of Petaluma General Plan as it relates to the incorporation of BMPs during project construction, however, there is no discussion of the project's impact as it relates to a conflict with the Climate Emergency Framework, adopted January 11, 2021. As set forth in the Framework, the City of Petaluma has a goal of reaching carbon neutrality by 2030. The release of 44,000 cubic feet of natural gas into the atmosphere is therefore inconsistent with the Framework, which was adopted for the purpose of reducing greenhouse gas emissions.

The City recommends that a discussion of the project's potential to conflict with the Climate Emergency Framework be analyzed and potential feasible mitigation measures be included that would offset the release of 44,000 cubic feet of natural gas into the atmosphere, thereby achieving carbon neutrality consistent with the City's adopted plan.

COMMISSION RESPONSE TO COMMENT GHG-1

Section 3.9.3b has been revised to describe the applicability of the City of Petaluma, County of Sonoma, and State GHG reduction goals for 2030. No additional mitigation measures are required.

Comment GHG-2

Impact (a) states that the project would only generate GHG emissions during project construction. Although it is understood that the project proposes replacement of an existing natural gas facility to make necessary safety improvements, prevent natural gas leaks, and ensure ongoing service reliability, there is no discussion in the impact analysis of the capacity of the existing and proposed pipelines, therefore the conclusion that there will be no operational GHG impacts is not supported by evidence.

The City recommends that the analysis provide evidence supporting the conclusion that the project will not result in operational GHG impacts. If the new pipeline will have additional capacity as compared to the existing pipeline, impacts of such operational emissions should be analyzed consistent with the most recent BAAQMD thresholds of significance and mitigation measures identified, as appropriate. Please clarify ongoing maintenance activities and any periodic line testing that may involve release over the life of the project. See also GHG-1 above regarding mitigating potential impacts from GHGs.

COMMISSION RESPONSE TO COMMENT GHG-2

Section ES.1 has been revised to clarify that the Project would not result in a change to the operational parameters (i.e., capacity, operational throughput, maintenance, or line testing) of PG&E's existing natural gas pipeline system given that the Project would only result in the replacement of a short segment of an existing pipeline.

Hazards & Hazardous Materials

Comment HAZ-1

The MND states "Agricultural lands in the southern work area were previously under cultivation for hay and are presently fallow." The MND does not identify potentially hazardous materials that could be present onsite associated with prior agricultural use. It is noted that Mitigation Measure HAZ-1 requires preparation of a Project Work and Safety Plan (PWSP) which is required to include measures for proper disposal of soils containing residual pesticides, however, presence of residual pesticides is not clearly described in the impact analysis.

The City recommends that the impact analysis be updated to clarify the former agricultural uses and potential residual pesticides that may be present.

COMMISSION RESPONSE TO COMMENT HAZ-1

Section 3.10.3a has been revised to note that agricultural lands were previously under cultivation for hay and may have had pesticides applied, and residual levels of pesticides may be present in soil. The impact analysis was not revised.

Hydrology & Water Quality

Comment HYDRO-1

As proposed, the project includes modifications to existing access roads throughout the site including establishment of laydown, staging, and construction areas. The figure below shows the location of an existing weir, which is critical to ensuring dredged materials reach the appropriate dissolved oxygen requirements prior to discharge into the Petaluma River. In this area, the width of the access road is limited by the weir. The MND does not identify the location of the existing weir, and as such, potential impacts to hydrology and water quality as a result of project construction proximate to the weir are not adequately analyzed.

The City recommends that the MND be updated to describe the location of the existing weir and update the hydrology and water quality impact discussion to identify potential impacts to the weir as a result of project construction. The analysis should include a discussion of the maximum vehicle and construction equipment types and their respective operating loads vis-a-vis the levee load capacity, in addition to size and turning radius limitations that need to be considered for the completion of proposed construction activities. If additional impacts are identified, implement feasible mitigation measures as appropriate.

COMMISSION RESPONSE TO COMMENT HYDRO-1

Section 3.11.3a has been revised to clarify that while some turns of the access road would be temporarily widened during construction activities to accommodate the turning radius of equipment, most straight sections of the access road and the weir (shown on Figure 2-2A) would not be modified. Based on those revisions, no additional impacts were identified.

Recreation

Comment REC-1

Impact (a) concludes that although Shollenberger Park will be closed for a period of 5 months which will result in increased use of other recreational facilities, with implementation of Mitigation Measure REC-1 impacts relating to deterioration of recreational facilities will be less than significant. MM REC-1 requires PG&E to submit a plan identifying commitments to ensure deterioration of park facilities will not occur and also requires the plan to identify temporary put-in and take-out locations for river recreation. As the put-in and take-out locations required to be identified by MM REC-1 are not known, impacts of activities associated with putting in and taking out recreational water vessels have not been fully analyzed.

The City recommends that put-in and take-out locations be identified and described as part of the project description. Include detailed information on the location and any necessary temporary improvements that will be needed to accommodate recreational water vessels and analyze impacts to environmental resource areas (e.g. biological resources) as appropriate.

COMMISSION RESPONSE TO COMMENT REC-1

Section 3.17.1 has been revised to include mention of additional existing sites where recreational opportunities are available for launching and taking out water vessels. As these existing sites are already in use for public recreation, no improvements would be necessary or impacts to natural habitat would occur to accommodate recreational water vessel use. MM REC-1 has been revised to address the City's concerns.

Comment REC-2

In addition to typical park users, the Petaluma Wetlands Alliance operates an annual third-grade educational program at Shollenberger Park, serving approximately 28-30 classes and 750-800 students each year. The intent of the program is to educate students about Shollenberger's wetlands, diverse habitats, and the importance of the Petaluma River to this unique ecosystem. Initial outreach and scheduling for the program begins in August with visits to the park between early October and mid-November and mid-March through mid-May.

The City recommends that to ensure continued access and operation of the PWAs educational program, the applicant and CSLC should consider an alternative construction plan that would limit access to the north and east access roads, thereby maintaining public access, including access for PWAs educational program, along the existing trails on the western portion of the site, adjacent to Alman Marsh. In addition, MM REC-1 should be updated to include coordination with the Petaluma Wetlands Alliance to ensure continued operation of this important educational program.

COMMISSION RESPONSE TO COMMENT REC-2

Section 3.17.3a has been revised to include additional details of PG&E's plans for the closure of Shollenberger Park. PG&E is still working on the details for limited public opening on weekends during the construction duration and will finalize those plans with the City of Petaluma prior to construction. PG&E will also work directly with the Petaluma Wetlands Alliance to make sure educational groups can safely navigate their way through the park as needed.

Comment REC-3

The MND assumes that recreational trips will be diverted to Helen Putnam Regional Park and Tolay Lake Regional Park, located approximately 5.8 and 6.2 miles from Shollenberger Park, respectively which will contribute to additional vehicle miles traveled and greenhouse gas emissions that would otherwise not be realized. Two existing recreational facilities, Alman Marsh and Ellis Creek Water Recycling Facility, are located adjacent to Shollenberger and are more comparable in their offerings and ecological setting as compared to Helen Putnam and Tolay Lake Regional Parks. Furthermore, Shollenberger, Alman Marsh, and Ellis Creek are non-fee based recreational facilities whereas regional parks require payment of fees for parking.

The City recommends that the MND be updated to reference anticipated use of Alman Marsh and Ellis Creek Water Recycling Facility during park closure. MM REC-1 should be updated to remove reference to Sonoma County Regional Parks. The City requests that as part of the plan prepared pursuant to MM REC-1, due to increased patronage and wear and tear of these parks caused by the temporary closure of Shollenberger Park, PG&E coordinate with the Parks & Recreation Department to discuss opportunities for financial contribution to the repair (temporary or permanent) of the existing boardwalk located at Alman Marsh, which would expand recreational access and offset the lack of access to Shollenberger throughout project construction.

COMMISSION RESPONSE TO COMMENT REC-3

Section 3.17.3a has been revised to include additional recreational facilities. MM REC-1 has been revised to address the City's concerns. The plan required under MM REC-1, which will be submitted to the City of Petaluma Parks and Recreation Department, will identify PG&E's commitments (financial or otherwise) to ensure that substantial deterioration to trails and other facilities does not occur as a result of displaced visits from Shollenberger Park.

Utilities and Service Systems

Comment UTIL-1

Impact (c) states that the project will result in no impact to the City's wastewater system, however, the analysis does not include a discussion of discharge to the city's sanitary sewer system as a result of excavation, which is anticipated as noted on page 2-9 of the MND.

The City recommends that the impact analysis be updated to include a discussion of discharge associated with excavation, including the anticipated quantity of discharge and potential impacts. Please note, the City is unable to accept high-salinity brackish water (e.g., river water).

COMMISSION RESPONSE TO COMMENT UTIL-1

Section 2.2.2 has been revised to clarify that none of the discharged water would be conveyed to the City's wastewater system. No revisions to the impact analysis are necessary.

Alternatives

Comment ALT-1

The MND does not include a discussion of alternatives to the closure of Shollenberger park for the duration of project construction.

While the City understands that alternatives are not explicitly required as part of an MND, given the importance of this valuable recreational amenity to the City of Petaluma and its residents, the City respectfully requests that an alternative plan be considered that would allow for continued access to Shollenberger park during construction activities and impacts be analyzed accordingly (see REC-1 above). If the alternative plan is deemed infeasible, we recommend a discussion of the consideration of alternatives be included in the project description or background section of the MND.

COMMISSION RESPONSE TO COMMENT ALT-1

Section 3.17.3a has been revised to include additional details of PG&E's plans for the closure of Shollenberger Park. PG&E is still working on the details for limited public opening on weekends during the construction duration and will finalize those plans with the City of Petaluma prior to construction. No revisions to the MND are necessary to discuss alternatives to the project.

Cumulative Comment

The City would like to inform the applicant and CSLC of additional construction projects forthcoming at Shollenberger Park. To ensure seamless coordination between the proposed pipeline replacement project and the City projects listed below, the City respectfully requests that any changes in the project construction timeline be communicated early on.

- Dredge removal project (in design process)
- Shollenberger Park Amphitheater and Kiosk (in design process)

COMMISSION RESPONSE TO CUMULATIVE COMMENT

This comment has been noted. Because the City of Petaluma is a responsible agency for the Project, and as such has jurisdiction to consider PG&E's application for a lot line adjustment for the utility easement among other permits (described in Comment City-1), it is expected that PG&E will consult with the City regarding the construction timeline. No change to the cumulative context is necessary.

California Department of Fish and Wildlife (CDFW)

Comment 1, Section 3.4, Mitigation Measure Shortcoming

Mitigation Measure (MM) BIO-5 does not provide adequate avoidance measures for the CRR and CBR [California Ridgway's rail and California black rail], both fully protected species.

To reduce impacts to CRR and CBR to less-than-significant and comply with Fish and Game Code CDFW recommends replacing MM BIO-5 with the mitigation measures provided in the comment letter on page 4.

COMMISSION RESPONSE TO COMMENT-1

MM BIO-5 has been revised as requested by CDFW.

Comment 2, Section 3.4, Mitigation Measure Shortcoming

Mitigation Measure (MM) BIO-7 does not provide adequate avoidance measures for the SMHM [salt marsh harvest mouse], a fully protected species.

To reduce impacts to SMHM to less-than-significant and comply with Fish and Game Code, CDFW recommends the mitigation measures provided in the comment letter on pages 4, 5, and 6.

COMMISSION RESPONSE TO COMMENT-2

MM BIO-7 has been revised as requested by CDFW.

Comment 3: Section 3.4, Environmental Setting Shortcoming

The MND does not evaluate potential impacts to SSBB [soft salty bird's-beak]. California Natural Diversity Database (CNDDB) records indicate a 1993 occurrence of SSBB within 3.5 miles of the project site, and it appears suitable habitat for the species is present at and adjacent to the project site.

For an adequate environmental setting and to reduce impacts to special-status plants to less-than-significant, CDFW recommends including the mitigation measures provided in the comment letter on pages 6 and 7.

COMMISSION RESPONSE TO COMMENT-3

Section 3.4.1.2 has been revised to include a description of the soft salty bird's-beak. A floristic survey of the Project area following the guidelines of CDFW and USFWS was conducted on June 26 and 27, 2023 and submitted to CDFW. The survey did not identify any listed or special-status plant species within the survey area. CDFW has agreed that under CEQA, impacts to soft salty bird's-beak would be less than significant. A project requirement for additional surveys (if requested by CDFW) will be included in the lease.

Comment 4: Section 3.4, Environmental Setting Shortcoming

The MND does not evaluate potential impacts to LFS [longfin smelt]. An unpublished report titled "Interdisciplinary Studies on Longfin Smelt in the San Francisco Estuary" documented LFS within the Petaluma River at or near the project location (Lewis et al. 2019).

For an adequate environmental setting and to reduce impacts to LFS to less-than-significant, CDFW recommends including the mitigation measure provided in the comment letter on page 7.

COMMISSION RESPONSE TO COMMENT-4

Section 3.4.1.2 has been revised to include a description of the longfin smelt. MM BIO-3 has been updated to include the longfin smelt, and Appendix D-1 has been updated to include the longfin smelt in the Potential to Occur table.

Comment 5: Section 3.4, Environmental Setting Shortcoming

The MND does not address potential impacts to California red-legged frog (*Rana draytonii,* CRLF). CNDDB records indicate a 1994 occurrence of CRLF within 0.85 miles of the project site. The project site is located within the California Wildlife Habitat Relationships predicted range for the species and supports potentially high value habitat.

For an adequate environmental setting and to reduce impacts to CRLF to less-than-significant, CDFW recommends including the mitigation measure provided in the comment letter on page 8.

COMMISSION RESPONSE TO COMMENT-5

Section 3.4.3.2 has been updated to explain that amphibian species, including California red-legged frog, are not expected to be present within the Project site due to the saline condition of the waters there. Red-legged frog have not been detected in Shollenberger Park, and the known occurrences in Ellis Creek are mainly in freshwater environments. No additional mitigation measures are required. During consultation, CDFW agreed that under CEQA, impacts to CRLF would be less than significant. A project requirement requiring additional surveys (if requested by CDFW) will be included in the lease.

EXHIBIT B. MITIGATION MONITORING PROGRAM

The California State Lands Commission (CSLC) is the lead agency under the California Environmental Quality Act (CEQA) for the PG&E Gas Line 021G/R-708 Replacement Project (Project). In conjunction with approval of this Project, the CSLC adopts this Mitigation Monitoring Program (MMP) for implementation of mitigation measures (MMs) for the Project to comply with Public Resources Code section 21081.6, subdivision (a), and State CEQA Guidelines[1] sections 15074, subdivision (d), and 15097.

The Project authorizes PG&E (Applicant) to decommission and replace Project-related facilities located (in part) within CSLC Lease No. 5438-B.

1.1 PURPOSE

It is important that significant impacts from the Project are mitigated to the maximum extent feasible. The purpose of an MMP is to ensure compliance and implementation of MMs. This MMP shall be used as a working guide for implementation, monitoring, and reporting for the Project's MMs.

1.2 ENFORCEMENT AND COMPLIANCE

The CSLC is responsible for enforcing this MMP. The Project Applicant is responsible for the successful implementation of and compliance with the MMs identified in this MMP. This includes all field personnel and contractors working for the Applicant.

1.3 MONITORING

CSLC staff may delegate duties and responsibilities for monitoring to other environmental monitors or consultants as necessary. Some monitoring responsibilities may be assumed by other agencies, such as affected jurisdictions (e.g., City of Petaluma, Sonoma County, California Department of Fish and Wildlife). The CSLC or its designee shall ensure that qualified environmental monitors are assigned to the Project.

[1] The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 et seq.

Environmental Monitors. To confirm implementation and success of the MMs, an environmental monitor must be on-site during all Project activities with the potential to create significant environmental impacts or impacts for which mitigation is required. Along with CSLC staff, the environmental monitor(s) are responsible for:

- Confirming that the Applicant has obtained all applicable agency reviews and approvals
- Coordinating with the Applicant to integrate the mitigation monitoring procedures during Project implementation
- Confirming that the MMP is followed

If a deviation from the MMP is necessary, the environmental monitor shall immediately submit a request to the CSLC staff or its designee for such deviation from the procedures identified in this MMP and shall not implement the request until CSLC staff or its designee approve the deviation and its correction.

Workforce Personnel. Implementation of the MMP requires the full cooperation of Project personnel and supervisors. Many of the MMs require action from site supervisors and their crews. To facilitate successful implementation, relevant mitigation procedures shall be written into contracts between the Applicant and any contractors.

General Reporting Procedures. A monitoring record form shall be provided to the Applicant, and once the Project is complete, a compilation of all monitoring record forms shall be submitted to CSLC staff. CSLC staff or its designated environmental monitor shall develop a checklist to track all procedures required for each MM and shall confirm that the timing specified for the procedures is followed. The environmental monitor shall note any issues that may occur and take appropriate action to resolve them.

Public Access to Records. Records and reports are open to the public and are to be provided upon request.

1.4 MITIGATION MONITORING PLAN

This section presents the MMs for Air Quality, Biological Resources, Cultural Resources, Cultural Resources – Tribal, Geology, Soils, and Paleontological Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Recreation, Transportation, and Wildfire. All other environmental factors were found to have less than significant or no impacts; therefore, they are not included. The MMP includes the following information:

- **Potential Impact**
- **Mitigation Measure** (full text of the measure)
- **Monitoring/Reporting Action** (action to be taken by monitor or Lead Agency)
- **Effectiveness Criteria** (how the agency can know if the measure is effective)1
- **Responsible Party** (entity responsible to ensure MM compliance)
- **Timing** (Phase 1 and/or 2; before, during, or after construction; during operation; etc.)

1.4.1 AIR QUALITY

Potential Impact: **Particulate matter criteria pollutant emissions**

MM AQ-1: Air Quality Construction Measures. PG&E shall implement the following Bay Area Air Quality Management District (BAAQMD) basic dust control practices:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

- Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure, Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign shall be posted with the telephone number and person to contact at PG&E regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Monitoring/Reporting Action: Observation reports

Effectiveness Criteria: Reduced particulate matter emissions

Responsible Party: PG&E and contractors

Timing: Phases 1 and 2, during construction activities

1.4.2 BIOLOGICAL RESOURCES

Potential Impact: **Special-status wildlife species and habitats**

MM BIO-1: Environmental Training Program. An environmental training program shall be developed and presented by a qualified biologist, approved by CSLC staff. All contractors and employees involved with the Project shall be required to attend the training program prior to starting work on the Project. At a minimum, the program shall cover special-status species that could occur on the site, their distribution, identification characteristics, sensitivity to human activities, legal protection, penalties for violation of state and federal laws, reporting requirements, and required Project avoidance, minimization, and mitigation measures.

Monitoring/Reporting Action: Signatures of trained employees for compliance

Effectiveness Criteria: All construction workers complete the program, special-status species avoidance

Responsible Party: PG&E and contractors

Timing: Phases 1 and 2, prior to Project construction activities

***Potential Impact:* Special-status wildlife species**

MM BIO-2: Biological Monitoring. A qualified biological monitor, approved by CSLC staff, shall survey the onshore work area for sensitive species or other wildlife that may be present no more than 24 hours prior to the commencement of Project activities. In addition, the biological monitor shall monitor Project activities within surface water and sensitive habitats, and other activities that have the potential to impact special-status species on a daily basis once Project activity begins unless otherwise approved in writing. If at any time during Project activities any special-status wildlife species are observed within the Project area, work around the animal's immediate area shall be stopped or work shall be redirected to an area within the Project area that would not impact these species until the animal is relocated by a qualified biologist. Listed species would be allowed to leave of their own volition, unless coordination with U.S. Fish and Wildlife Service and/or the California Department of Fish and Wildlife (CDFW) provides authorization for relocation by a qualified biologist with appropriate handling permits. In consultation with CDFW, an escape ramp may be installed to facilitate exit for the species. Work would resume once the animal is clear of the work area. In the unlikely event a special-status species is injured or killed by Project-related activities, the biological monitor shall stop work, notify CSLC, and consult with the appropriate agencies to resolve the impact prior to re-starting work in the area.

Monitoring/Reporting Action: Observation reports

Effectiveness Criteria: Special-status species avoidance

Responsible Party: PG&E and contractors

Timing: Phases 1 and 2, prior to the start and throughout Project construction activities

***Potential Impact:* Special-status fish and aquatic species and habitats**

MM BIO-3: Special-Status Fish Protection To avoid impacts on steelhead, longfin smelt, or ~~the species'~~ designated critical habitat, pipeline removal shall be conducted only during the National Marine Fisheries Service (NMFS) - recommended work window (June 15 to October 15) and shall comply with all NMFS-recommended measures for protection of fish species. The project shall adhere to the work period and all other requirements of the CDFW Lake and Streambed Alteration Agreement issued for the project.

MM BIO-4: Turbidity Monitoring Plan. The Applicant shall implement a Turbidity Monitoring Plan during all in-water work to define allowable turbidity thresholds and ensure that turbidity levels upstream and downstream of the Project area are compliant with regulatory requirements for protection of aquatic species. A qualified environmental monitor, approved by CSLC staff, shall be present during in-water work to regularly monitor turbidity levels upstream and downstream of in-water work activities. If the results of the turbidity monitoring plan detect a Project-related increase in turbidity that exceeds the allowable thresholds for increased turbidity, as defined by regulatory permits, work shall stop while corrective measures are implemented. Corrective measures may include the use of a turbidity curtain or other sediment control devices, alteration to the timing and duration of in-water work and excavation, or minor modifications in methodology that result in reducing the in-water excavation.

Monitoring/Reporting Action: Submit plan to CSLC for review and approval at least 30 days prior to in-river work, and weekly monitoring results

Effectiveness Criteria: Minimized turbidity, no associated special-status fish and aquatic species injury or mortality

Responsible Party: PG&E and contractors

Timing: Phase 2, prior to the start of and throughout in-river construction work

Potential Impact: **Nesting birds**

MM BIO-5: ~~Nesting Bird Season Pre-Construction Surveys~~.Protection of Nesting Birds, Including Rail Species.

~~If Project-related vegetation removal and ground-clearing activities are scheduled between March 1 and August 1, then rail surveys will be conducted in suitable habitat for Ridgway's and black rails within 700 feet of the Project area in the season prior to planned work (January/February). If nesting rails are detected, work will be avoided within a 700-foot buffer around the nest area for the duration of nesting season.~~

a. Monitoring. A qualified biologist or biological monitor shall be present on-site to survey and monitor for Fully Protected species, including Ridgway's rail, California black rail and salt marsh harvest mouse (discussed below) during: a) all vegetation removal, b) the construction of exclusion fencing, and c) all work within 300 feet of tidal or pickleweed habitats. The qualified biologist or biological monitor shall have the authority to stop work if deemed necessary for any reason to protect these species, or any other special-status species.

b. High Tide Restrictions. No project activities shall occur within 50 feet of suitable rail habitat during extreme high tide events or when adjacent tidal marsh is flooded. Extreme high tides events are defined as a tide forecast of 6.5 feet or higher measured at the Golden Gate Bridge and adjusted to the timing of local high tides.

c. Avoidance and Surveys. Project activities within suitable rail breeding habitat or within 700 feet of such habitat shall be avoided during rail breeding season (January 15 – August 31 for Ridgway's, February 1 – August 31 for black rail) each year unless appropriately timed, yearly protocol level surveys are conducted and survey methodology and results are submitted to and accepted by CDFW. Surveys shall focus on suitable habitat that may be disturbed by project activities during the breeding season to ensure that these species are not nesting in these locations. If breeding rails are determined to be present, no activities, visual disturbance (direct line of sight) and/or an increase in the ambient noise level shall occur within 700 feet of areas where rails have been detected during the breeding season. If surveys have not been conducted, all work shall be conducted 700 feet from suitable rail habitat during nesting season.

d. Other Nesting Bird Surveys. Other nesting bird pre-construction surveys shall be conducted within 1 week prior to the start of construction in potential nesting habitat within 350 feet of the Project area to identify nest sites, and a report shall be submitted to CSLC and CDFW for review within 1 week of pre-construction surveys, that outlines the surveys conducted, nest locations identified, and recommended nest protection buffers. Construction activities shall be prohibited within the established buffer zones until the young have fledged. If an active raptor or passerine bird nest is identified, an appropriate species-specific nest protection buffer shall be recommended based on a Nesting Bird Management Plan approved by the CDFW and site-specific conditions.

Monitoring/Reporting Action: Submit pre-construction survey report to CSLC and CDFW prior to ground disturbance during the nesting bird season, submit proposed buffers to CSLC and CDFW for review, monitoring

Effectiveness Criteria: Compliance with buffers

Responsible Party: PG&E and contractors

Timing: Phases 1 and 2, prior to the start and throughout Project construction activities. ~~conducted between March 1 and August 1~~

***Potential Impact:* Western pond turtle**

MM BIO-6: Western Pond Turtle Pre-Construction Surveys. A qualified biologist, approved by CSLC, shall conduct pre-construction surveys for western pond turtle (WPT) and their nests 48 hours prior to ground disturbance to ensure that individuals are not present in the work areas on or adjacent to levee banks as well as the Pipe Staging Area. Prior to ground disturbance activities, a barrier, such as wildlife exclusion fencing, shall be placed around the excavation area to prevent WPT from moving into work areas. A qualified biological monitor shall be present to monitor project activities during all in-water work and initial ground disturbance that has the potential to impact special-status species. Should WPT be found within the work areas, a qualified biologist in consultation with CDFW shall relocate the species outside of work area barriers. If WPT nests are identified, a nest protection buffer area, as approved by CDFW, shall be established around the nest(s). Construction activities shall be prohibited within the established buffer zone until the hatchlings emerge.

Monitoring/Reporting Action: Submit pre-construction survey report to CSLC prior to ground disturbance, CDFW consultation if needed, CDFW approval for nest protection buffer if needed, monitoring

Effectiveness Criteria: Barrier fencing in place if needed, WPT relocated as needed, nesting buffers established if needed, no WPT mortality

Responsible Party: PG&E and contractors

Timing: Phases 1 and 2, prior to the start and throughout construction in work areas on or adjacent to levee banks as well as the Pipe Staging Area.

***Potential Impact:* Terrestrial Marsh Species**

MM BIO-7: Protection of Terrestrial Marsh Species, including Salt Marsh Harvest Mouse. PG&E shall ensure the implementation of the following measures:

- No project activities shall occur within 50 feet of tidal marsh habitat within two hours before and after an extreme high tide event (6.5 feet or higher measured at the Golden Gate Bridge and adjusted to the timing of local high tides) or when adjacent marsh is flooded unless exclusion fencing has been installed around the work area.

- ~~Work areas within 200 feet of tidal marsh shall be bordered by temporary exclusion fencing. The fence shall be made of a smooth material that does not allow the salt marsh harvest mouse to climb or pass through, of a minimum aboveground height of 30 inches, and the bottom shall be buried to a depth of at least 6 inches so that mice cannot crawl under the fence. Installation of the fence shall be monitored by a qualified biologist with experience with this species, who will check the fence alignment before vegetation clearing and fence installation to ensure no special-status species are present.~~
- Where tidal marsh habitat cannot be avoided and PG&E proposes vegetation removal, vegetation removal from the ground disturbance work area plus a 10-foot buffer around the area shall be implemented using hand tools or another method approved by USFWS and CDFW ~~and shall not be implemented using heavy equipment such as an excavator. Vegetation height within the buffer zone shall be maintained at or below 5 inches above ground. Vegetation removal in wetland habitat shall be conducted under the supervision of a qualified biologist(s) approved by CSLC~~.
- Prior to vegetation removal in Salt Marsh Harvest Mouse (SMHM) habitat, an approved qualified biologist or biological monitor, approved by CSLC and familiar with the species, shall walk through and inspect suitable habitat prior to vegetation removal and search for signs of harvest mice or other sensitive wildlife and plants. Following inspection, personnel, under the supervision of the qualified biologist, will disturb (e.g., flush) vegetation to force movement of SMHM into adjacent marsh areas. Flushing of vegetation will first occur in the center of the site then progress toward the two sides away from the open water areas or in this case, away from impacted habitat. Immediately following vegetation flushing, personnel, under the supervision of the qualified biologist or biological monitor, will remove vegetation with hand tools (e.g., weed-eater, hoe, rake, trowel, shovel, grazing) so that vegetation is no taller than 2 inches.
- After vegetation removal, an exclusion fence impermeable to mice shall be placed along the edge of the area removed of vegetation. The fence shall be made of a heavy plastic sheeting material that does not allow mice to pass through or climb, and the bottom shall be buried to a depth of 4 inches. Fence height shall be at least 12 inches higher than the highest adjacent vegetation with a maximum height of 4 feet. All supports for the exclusion fencing shall be placed on the inside of the work area. An approximately 2-foot-wide de-vegetated buffer shall be created along the habitat side of the exclusion fence.

- The exclusion fencing shall remain in operating condition throughout the duration of all project activities in salt marsh habitat. The qualified biologist or biological monitor shall inspect daily the integrity of the exclusion fencing to ensure there are no gaps, tears, or damage. Maintenance of the fencing shall be conducted as needed. Any necessary repairs to the fencing shall be completed within 24 hours.

Monitoring/Reporting Action: Observation reports

Effectiveness Criteria: Avoidance of special-status species

Responsible Party: PG&E and contractors

Timing: Phase 1 and 2, prior to the start of Project activities

***Potential Impact:* Wetlands and Riparian habitat**

MM BIO-4: Turbidity Monitoring Plan (See above).

MM BIO-8: Avoidance and Minimization of Impacts on Wetlands. PG&E shall ensure the implementation of the following measures:

- Prior to construction, the Project biologist, approved by CSLC, shall flag wetland features next to and within work areas for avoidance. Where possible, no ground disturbing activities shall take place within 50 feet of a wetland. At the southern work area crews shall install plating or a temporary bridge to allow for travel across the ditch surrounding the farmed wetland.
- Permanent impacts on jurisdictional wetlands shall be mitigated by the creation, restoration, enhancement, or preservation of on- or off-site wetlands at an equal ratio, or as determined through permit requirements to be issued for the Project from the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW.
- Before construction begins, the Project engineer and a qualified biologist, approved by CSLC, shall identify locations for equipment and personnel access and materials staging that will minimize wetland vegetation disturbance. When heavy equipment is required, unintentional soil compaction shall be minimized by using equipment with a greater reach, low-pressure equipment, or construction mats. Vegetation clearing shall be limited to areas outside of marshland habitat to the greatest extent possible. For vegetation management activities occurring adjacent to wetland habitat, herbicides to be used shall be U.S. Environmental Protection Agency–certified for use in and adjacent to aquatic environments.

- No less than one month prior to construction, PG&E shall prepare a habitat restoration and monitoring plan for the restoration of temporary wetland impacts and submit it to the CSLC for review and approval. The plan shall describe requirements for any needed salvage and replanting protocols before and after construction is complete, to restore the wetland value to its original state prior to construction, based on the pre-construction surveys. The restoration plan shall be prepared in consultation with the nonprofit Petaluma Wetlands Alliance, the City of Petaluma, and CDFW.
- This plan shall include but not be limited to protocols for the replanting of wetland plants removed before or during construction, and management and monitoring of the plants to ensure successful replanting pursuant to the requirements of permits issued for the Project. The revegetation protocol shall use native species sourced from the local watershed or adjacent watersheds.
- The monitoring plan shall include annual monitoring by a qualified biologist of restored areas, to be submitted annually for 5 years unless otherwise approved in writing. The plan shall contain vegetation management protocols, monitoring protocols, performance criteria (i.e., success criteria), and an adaptive management plan if success criteria are not being met. The adaptive management plan shall include interim thresholds for success including percent cover of wetland plants, and percent cover of weed species, to be assessed each year as well as alternative management approaches to undertake if thresholds are not met (e.g., weed control or additional replanting).

Monitoring/Reporting Action: Submit Habitat Restoration and Monitoring Plan to CSLC for review and approval at least 30 days prior to Phase 1 implementation, post-Project observations and report(s) to CSLC

Effectiveness Criteria: Avoidance and ~~R~~restoration of disturbed wetlands and riparian habitats

Responsible Party: PG&E and contractors

Timing: Phase 1 and Phase 2, prior to the start and throughout Project construction activities as well as post-Project monitoring

Other applicable mitigation measures for potential impacts to biological resources

MM HAZ-2: Inadvertent Release Contingency Plan; MM HYD-1: Stormwater Pollution Prevention Plan

1.4.3 CULTURAL / TRIBAL CULTURAL RESOURCES

Potential Impact: **Unknown cultural or tribal cultural resources**

MM CUL-1/TCR-1: Cultural Resources Awareness Training. Prior to Project implementation, a consultant and construction-worker cultural and tribal cultural resources awareness training program for all personnel involved in Project implementation shall be developed in coordination with the PG&E Cultural Resource Specialist (CRS), the qualified on-site archaeologists and the consulting Native American Tribe (Federated Indians of Graton Rancheria). The training will be conducted by the Project archaeologist and Tribal Representative(s) and must be provided to all Project employees, contractors, subcontractors, and other workers prior to their involvement in any ground-disturbing activities, with subsequent training sessions to accommodate new personnel becoming involved in the Project. Evidence of compliance with this mitigation measure shall be documented within pre-Project compliance documentation materials prior to Phase 1 and Phase 2 mobilizations throughout Project implementation.

The purpose of the training shall be to educate on-site construction personnel as to the sensitivity of archaeological and Tribal cultural resources in the Project area, including understanding the difference between non-Native archaeological resources (cultural resources) and resources that are Native American in nature (Tribal cultural resources). The training will also cover the requirements of the plan identified in MM CUL-2/TCR-2, including the possibility of exposing cultural or Tribal cultural resources, guidance on recognizing such resources, and direction on procedures if a potential resource is encountered. PG&E shall instruct all Project personnel that touching, collecting, or removing cultural materials from the property is strictly prohibited. The program will also underscore the requirement for confidentiality and culturally appropriate treatment of any find of significance to Native Americans, consistent with Native American tribal values and customs. The training shall include, at a minimum:

- A brief overview of the cultural sensitivity of the Project site and surrounding area
- What resources could potentially be identified during ground disturbance
- The protocols that apply in the event unanticipated cultural or tribal cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated

- Consequences in the event of noncompliance
- Safety procedures when working with monitors

Monitoring/Reporting Action: Pre-Project training for contractors of cultural and tribal cultural resource sensitivity, training documented to CSLC

Effectiveness Criteria: Reduced potential impacts to unknown cultural and tribal cultural resources

Responsible Party: PG&E, contractors, and CSLC

Timing: Phases 1 and 2, prior to construction

Potential Impact: **Unknown cultural or tribal cultural resources**

MM CUL-2/TCR-2: Cultural and Tribal Cultural Resources Management and Treatment Plan (CRMTP). Prior to implementation of Phase 1 and Phase 2 activities, PG&E shall develop a comprehensive Cultural Resources Management and Treatment Plan (CRMTP) for review and concurrence by CSLC staff and the consulting tribe(s). No tribal cultural resources shall be collected, relocated, or otherwise impacted until the approved CRMTP is in place. The purpose of the CRMTP is to describe the procedures and requirements for protection and treatment of both non-Native American archaeological or historic resources and Tribal cultural resources that may be discovered during Project implementation. The CRMTP shall be provided to the CSLC and representatives from the consulting Tribe (Federated Indians of Graton Rancheria) for review and concurrence at least 45 days before the start of construction. PG&E shall fully carry out, implement, and comply with the CRMTP throughout all phases of construction. The CRMTP shall include at a minimum:

- A description of the roles and responsibilities of cultural resources personnel, including the PG&E Cultural Resource Specialist (CRS), the qualified on-site archaeologists, and Tribal Representatives (who may also be monitors), and the reporting relationships with Project construction management, including lines of communication and notification procedures
- Description of how the monitoring shall occur and the frequency of monitoring, consistent with the recommendations submitted by the consulting tribe during consultation on the Project (pursuant to Public Resources Code Sections 21080.3.2 and 21082.3) and reflected in the criteria listed in these mitigation measures
- Description of what resources may be inadvertently encountered

- Description of procedures for halting work on the site, establishment of buffer zones around potential finds, and notification procedures
- Description of the respective authorities of the PG&E CRS, on-site archaeologist, and Tribal Representative(s) to evaluate and determine significance of discoveries, and authority to determine appropriate treatment, depending on whether the discovery is Native American in nature
- Provisions for treatment of tribal cultural resources and the recommended treatment protocols submitted by the consulting Tribe during consultation on the Project (pursuant to Public Resources Code Sections 21080.3.2 and 21082.3)
- Provisions for the culturally appropriate handling of Tribal cultural resources, if avoidance is infeasible, including procedures for temporary custody, processing materials for reburial, minimizing handling of cultural materials, and development of a reburial plan and agreement for returning materials to a suitable location in the Project area where they would not be subject to future disturbance
- Procedures for the appropriate treatment of human remains, pursuant to California Health and Safety Code section 7050.5 and California Public Resources Code section 5097.98, which include procedures for determination of a most likely descendant by the Native American Heritage Commission
- A description of monitoring reporting procedures including the requirement that reports resulting from the Project be filed with the Northwest Information Center (NWIC) and the North Central Information Center (NCIC) and copies provided to CSLC, USACE, and the consulting Tribe (Federated Indians of Graton Rancheria), consistent with their geographic affiliation, within one year of Project completion

Monitoring/Reporting Action: Submit CRMTP to CSLC and California Native American tribe(s) for review and approval

Effectiveness Criteria: Approved CRMTP

Responsible Party: PG&E and CSLC

Timing: 45 days prior to Phase 1 construction implementation

Potential Impact: **Unknown cultural or tribal cultural resources**

MM CUL-3/TCR-3: Cultural Resources Construction Monitoring. In addition to providing the training required by MM CUL-1/TCR-1, the PG&E CRS, and/or their on-site archaeologist, shall provide monitoring during implementation of Phase 1 and Phase 2 activities, as may be specified in the CRMTP required by MM CUL-2/TCR-2. PG&E shall also retain a Federated Indians of Graton Rancheria Tribal Representative, if one is available, who will monitor all Project construction areas. Activities to be monitored include, but are not limited to, the Phase 1 horizontal directional drilling (HDD) bore pits excavated for the Northern and Southern Work Areas as well as terrestrial trenching for both Phase 1 and Phase 2. Both the archaeologist and the Tribal Monitor(s) shall have the authority to temporarily halt or redirect construction in the event that potentially significant cultural resources or tribal cultural resources are discovered during Project related activities. The work stoppage or redirection shall occur to an extent sufficient to ensure that the resource is protected from further impacts. Detailed monitoring procedures, including criteria for increasing or decreasing monitoring and the location and scope of monitoring activities agreed to by both PG&E CRS-designated on-site archaeologist and Tribal monitor(s), shall be outlined in the CRMTP identified in MM CUL-2/TCR-2. The Applicant shall provide a minimum 2-week notice to the on-site archaeologist and designated representatives from the consulting Tribe prior to all activities requiring monitoring and shall provide safe and reasonable access to the Project site. The monitor, if available, shall work in collaboration with the inspectors, Project managers, and other consultants hired/employed by PG&E or the PG&E's Contractor.

Monitoring/Reporting Action: CRS/on-site archaeologist and California Native American tribe(s) monitors present during ground disturbance

Effectiveness Criteria: Discovery and identification of unknown cultural or tribal resources, if present

Responsible Party: PG&E and CSLC

Timing: Phases 1 and 2, during construction

Potential Impact: **Unknown cultural or tribal cultural resources**

MM CUL-4/TCR-4: Discovery of Previously Unknown Cultural Resources or Tribal Cultural Resources. If any potential Tribal cultural resources, archaeological resources, other cultural resources, or articulated or disarticulated human remains are discovered by the Tribal Monitor(s), designated on-site archaeologist, or other Project personnel during construction activities, all work shall cease within 100 feet of the find, or a distance agreed upon by the on-site archaeologist and Tribal Monitor(s) based on the project area and nature of the find. Work stoppage shall remain in place until the Tribal Monitor, PG&E CRS, and the designated on-site archaeologist have jointly determined the nature of the discovery, and the significance of the discovery has been determined by either the archaeologist/cultural resources specialist (for cultural resources) or the Tribal monitor (for tribal cultural resources), as detailed in the CRMTP identified in MM CUL-2/TCR-2. Tribal cultural resources shall not be photographed nor be subjected to any studies beyond such inspection as may be necessary to determine the nature and significance of the discovery. If the discovery is confirmed as potentially significant or a tribal cultural resource, an Environmentally Sensitive Area (ESA) will be established using fencing or other suitable material to protect the discovery during subsequent investigation. No ground-disturbing activities shall be permitted within the ESA until the area has been cleared for construction. The exact location of the resources within the ESA must be kept confidential and measures shall be taken to secure the area from site disturbance and potential vandalism.

Impacts to previously unknown significant cultural and Tribal cultural resources shall be avoided through preservation in place if feasible. If the on-site archaeologist or Tribal monitor, as appropriate, determines that damaging effects on the cultural or Tribal cultural resource can be avoided in place, then work in the area may resume provided the area of the discovery remains clearly marked for no disturbance. Title to all archaeological sites, historic or cultural resources, and Tribal cultural resources on or in the tide and submerged lands of California is vested in the State and under CSLC jurisdiction. The final disposition of archaeological, historical, and Tribal cultural resources recovered on State lands under CSLC jurisdiction must be approved by the CSLC.

Monitoring/Reporting Action: Tribal Monitor, PG&E CRS and the designated on-site archaeologist to evaluate the find and report to CSLC

Effectiveness Criteria: ESA established for potentially significant find(s)

Responsible Party: PG&E, contractors, and CSLC

Timing: Phases 1 and 2, during construction activities

***Potential Impact:* Unanticipated discovery of human remains**

MM CUL-5/TCR-5: Unanticipated Discovery of Human Remains. If human remains or associated grave goods (e.g., non-human funerary objects, artifacts, animals, ash or other remnants of burning ceremonies) are encountered, all ground disturbing activities shall halt within 100 feet of the discovery or other agreed upon distance based on the project area and nature of the find; the remains will be treated with respect and dignity and in keeping with all applicable laws including California Health and Safety Code section 7050.5 and California Public Resources Code section 5097.98. If representatives are not already on site when a discovery is made, the Project archaeologist or their designated on-site cultural resources specialist, Tribal Representative(s), PG&E, and CSLC shall be notified immediately. The archaeologist shall contact the County Coroner within 24 hours. If human remains are determined by the County Coroner to be of Native American origin, the County Coroner shall notify the Native American Heritage Commission within 24 hours of this determination, and the Native American Heritage Commission shall identify a Most Likely Descendent. No work is to proceed in the discovery area until consultation is complete and procedures to avoid or recover the remains have been implemented. Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act, Cal. Govt. Code § 6250 et seq. The reburial plan described in the CRMTP identified in MM CUL-2/TCR-2 shall include specific details about temporary custody of remains, reburial location, confidentiality, and recordation in the California Historic Resources Inventory System.

Monitoring/Reporting Action: Notifications/Consultations with County Coroner and NAHC (if applicable), copy to CSLC

Effectiveness Criteria: Reduced impacts to human remains (if found)

Responsible Party: PG&E, contractors, and CSLC

Timing: Phases 1 and 2, during construction activities

1.4.4 GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES

Applicable mitigation measures for potential impacts to geology, soils, and paleontological resources

MM HYD-1: Stormwater Pollution Prevention Plan

1.4.5 HAZARDS AND HAZARDOUS MATERIALS

***Potential Impact:* Water or soil contamination**

MM HAZ-1: Project Work and Safety Plan. A Project Work and Safety Plan (PWSP) shall be submitted to CSLC staff and all other pertinent agencies for review and approval at least 30 days prior to the implementation of the Project that includes both phases. The PWSP shall include the following information (at a minimum):

- Contact information
- Safety Data Sheets (SDS) that contains information on potential hazardous materials and chemicals on site
- Hazardous Spill Response and Contingency Plan
- Emergency Action Plan
- Summary of the Project HDD Execution Plan
- Project Management Plan
- Site Safety Plan, including measures for proper handling of hazardous materials including, but not limited to soils containing residual pesticides
- Permit Condition Compliance Matrix

Monitoring/Reporting Action: Submission of PWSP to CSLC at least 30 days prior to Phase 1 implementation~~CSLC review and approval of PWSP 30 days prior to Phase 1 implementation~~, documentation including emergency agency notification, on-site spill response team to verify, CSLC-approved monitor to ensure compliance

Effectiveness Criteria: Reduced risks of water or soil contamination

Responsible Party: PG&E and contractors

Timing: Phases 1 and 2, prior to and throughout Project activities

***Potential Impact:* Drilling fluid migration**

MM HAZ-2: Inadvertent Release Contingency Plan. PG&E and/or its selected contractor shall submit an Inadvertent Release Contingency Plan to CSLC for review and approval. The draft Inadvertent Release Contingency Plan (contained in the HDD Execution Plan) shall be finalized at least 30 days prior to construction and implemented during HDD construction. The Final Inadvertent Release Contingency Plan shall contain measures to detect and address any inadvertent drilling fluid migration outside of the HDD drill hole, including measures to limit the potential for drilling fluid release (frac-out) into the Petaluma River.

Monitoring/Reporting Action: Submit Inadvertent Release Contingency Plan to CSLC for review and approval, monitoring during HDD activities

Effectiveness Criteria: Mitigation of drilling fluid migration (if occurs)

Responsible Party: PG&E and HDD drilling contractor

Timing: Phase 1, prior to and during HDD drilling activities

Potential Impact: **Existing pipeline/utility disturbance in riverbed**

MM HAZ-3: Pre- and Post-Project Bathymetric and Surficial Features Multi-Beam Debris Survey. Pre- and post-Project Bathymetric and Surficial Features Multi-Beam Debris Surveys of the riverbed shall be conducted using a vessel equipped with a multi-beam sonar system. The pre-Project survey, used in conjunction with previously collected data, shall serve to fully identify pre-Project bottom contours, debris, and any exposed utilities, and a copy of the survey shall be submitted to CSLC staff for review 30 days prior to Project implementation. A post-Project Bathymetric and Surficial Features Multi-Beam debris survey shall also be performed, and the results compared to the initial baseline survey. Any anomalous objects that were not already found and identified in the pre-Project survey and that remain unidentified during the bathymetric and debris surveys shall be positively identified using methods such as divers or ROV. All Project-related debris shall be recovered. A Project close-out report with drawings shall be submitted to the CSLC within 60 days of work completion.

Monitoring/Reporting Action: Pre-Project and post-Project geophysical debris survey results submitted to CSLC

Effectiveness Criteria: Avoidance of pipelines, utilities, and debris as well as removal of all Project-related debris

Responsible Party: PG&E and contractors

Timing: ~~Phase 2,~~ 30 days prior to Phase 2 construction implementation, and 60 days after Project completion

Potential Impact: **Asbestos exposure**

MM HAZ-4: Asbestos Handling Procedures. PG&E shall inform construction personnel of the potential presence of asbestos-containing material (ACM) at the Project site prior to their assignment. After exposing the existing pipeline for removal, and prior to the start of cutting and tie-in activities, a certified asbestos inspector/consultant shall test whether the coating consists of ACM greater than 1 percent by weight. If testing reveals the coating contains ACM less than 1 percent by weight, the pipeline segment shall be treated as normal construction waste and no additional measures are required. If testing reveals the coating contains ACM equal to or greater than 1 percent by weight, the materials shall be controlled by a certified asbestos abatement contractor in accordance with the regulations and notification requirements of BAAQMD Rule 2, and in accordance with applicable worker safety regulations. All ACM removed from the pipeline segment(s) shall be labeled, transported, and disposed of at a verified and approved ACM disposal facility.

Monitoring/Reporting Action: Inspections and testing (if necessary) for asbestos. Lab report results to CSLC, with abatement plan if required

Effectiveness Criteria: Proper containment of ACM

Responsible Party: PG&E and contractors

Timing: Phases 1 and 2, during all pipeline removal and tie-in activities

1.4.6 HYDROLOGY AND WATER QUALITY

Potential Impact: **Runoff and sedimentation**

MM HYD-1: Stormwater Pollution Prevention Plan. PG&E and/or their selected contractor shall develop and implement a Stormwater Pollution Prevention Plan (SWPPP) consistent with the Statewide NPDES Construction General Permit (Order No. 2022-0057 DWQ, or current effective order). The SWPPP shall be provided to CSLC at least 30 days prior to construction ground disturbing activities. At a minimum, the SWPPP shall include measures to:

- Establish standard best management practices, such as the use of silt fencing and straw wattles within the disturbance footprints at each terrestrial excavation location.

- Install and maintain fiber rolls and sediment basins (as applicable) to limit unauthorized discharges of pollutants into surface waters.
- Preserve existing vegetation, and establish effective soil cover to the extent feasible (e.g., through geotextiles, straw mulch, native species hydroseeding) for inactive areas and finished slopes to prevent sediments from being dislodged by wind, rain, or flowing water.
- Establish good housekeeping measures such as: daily site clean-up/trash removal; covering spoils piles; limiting construction vehicle/equipment storage and maintenance to specified areas; and maintaining hazardous materials handling procedures to prevent the release of wastes and hazardous materials used at the site.
- Limit fugitive dust in a manner that maintains adequate soil moisture while also not generating conditions of puddling or runoff.
- Implement spill prevention and control measures to identify the proper storage and handling techniques of fuels and lubricants, and the procedures to follow in the event of a spill.

Monitoring/Reporting Action: SWPPP submitted to CSLC, observation reports

Effectiveness Criteria: Minimize erosion, siltation, and turbidity

Responsible Party: PG&E and contractors

Timing: Phases 1 and 2, during all Project construction activities

Other applicable mitigation measures for potential impacts to hydrology and water quality

MM HAZ-2: Inadvertent Release Contingency Plan, MM BIO-4: Turbidity Monitoring Plan

1.4.7 RECREATION

Potential Impact: **Interaction with Recreational vessels**

MM REC-1: Increased Services to Area Parks and Trails. At least 30 days before the closure of Shollenberger Park, PG&E shall submit a plan for temporarily increased services at Petaluma-area parks and trails to CSLC, the City of Petaluma Parks and Recreation Department, and the Petaluma Wetlands Alliance~~Sonoma County Regional Parks~~. The plan shall cover the duration of the closure of Shollenberger Park and shall identify PG&E's commitments (financial or otherwise) to ensure that substantial deterioration to trails and other facilities does not occur as a result of displaced visits from Shollenberger Park. The Plan shall also identify the available put-in and take-out locations for river recreation and boating during Phase 2 river closure. The plan (to be finalized with consultation of City of Petaluma and the Petaluma Wetland Alliance ~~County Parks~~) may identify but not be limited to the following elements:

- Financial contribution toward repair or maintenance of the trails at Alman Marsh and/or Ellis Creek Water Recycling Facility
- Increased restroom servicing schedules
- Increased solid waste and recycling service
- Increased provision of pet waste bags and waste receptacles
- Signage to manage increased parking pressure and notify the public of alternate park locations, as well as put-in and take-out locations for river recreation and boating.

Monitoring/Reporting Action: Review closure plan

Effectiveness Criteria: Reduction of potential impact to park users and recreational users

Responsible Party: PG&E and contractors

Timing: Phase 1, at least 30 days prior to closure of Shollenberger Park

Potential Impact: **Interaction with recreational vessels**

MM REC-2: Advance Notice to Mariners. All in-water activity shall be described in a Local Notice to Mariners to be submitted to the U.S. Coast Guard at least 15 days prior to Phase 2 activities. The Notice shall include:

- Type of operation (i.e., dredging, diving operations, construction).
- Location of operation, including latitude and longitude and geographical position, if applicable.
- Duration of operation, including start and completion dates (if these dates change, the U.S. Coast Guard needs to be notified).

- Vessels involved in the operation.
- VHF-FM radio frequencies monitored by vessels on the scene.
- Point of contact and 24-hour phone number.
- Chart Number for the area of operation.

Monitoring/Reporting Action: Publication of notice
Effectiveness Criteria: Reduction of potential impact to recreational vessels
Responsible Party: PG&E and contractors
Timing: Phase 2, at least 15 days prior to vessel departure to Project area

1.4.8 TRANSPORTATION

***Potential Impact:* Traffic impacts**

MM T-1: Traffic Control Plan. Before the start of Project construction activities, a traffic control plan shall be submitted to CSLC and the City of Petaluma for review and approval. The plan shall include measures such as appropriate signage, traffic cones, and flaggers to allow for emergency vehicle and property access during Project construction.

Monitoring/Reporting Action: Review Control Plan, documentation within compliance monitoring sheets
Effectiveness Criteria: Minimized risks with associated traffic congestion and vehicle conflicts
Responsible Party: PG&E and contractors
Timing: Phase 2, prior to Project construction activities

Other applicable mitigation measures for potential impacts to transportation

MM REC-2: Advance Notice to Mariners

1.4.9 WILDFIRE

Potential Impact: Wildfire

MM WF-1: Site-Specific Wildfire Safety Plan. 30-days prior to start of Project construction activities, PG&E and/or its contractors shall prepare and submit a site-specific safety plan to CSLC and the City of Petaluma Fire Department for review and approval. The plan shall identify marshlands as potentially high fire risk areas due to the difficulty of fighting fires in such areas. Among other elements, the plan shall include construction fire prevention measures such as using spark arrestors, prohibiting the dragging of chains or materials from trucks, limiting hot work during high winds, and prohibiting smoking by workers or visitors to the site. The plan shall also identify immediate actions to take in the event of an ignition to prevent the uncontrolled spread of a fire.

Monitoring/Reporting Action: Review Safety Plan; Documentation within compliance monitoring sheets

Effectiveness Criteria: Minimized risks of wildfire

Responsible Party: PG&E and contractors

Timing: Phases 1 and 2, 30 days prior to Project construction activities

Other applicable mitigation measures for potential impacts to wildfire

MM T-1: Traffic Control Plan