APPENDIX I

Mitigation Monitoring Program

MITIGATION MONITORING PROGRAM

The California State Lands Commission (CSLC) is the lead agency under the California Environmental Quality Act (CEQA) for the Threemile Slough Pipeline Crossings Remediation and Decommissioning Project (Project). In conjunction with approval of this Project, the CSLC adopt 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 sections 15074, subdivision (d), and 15097.

The Project authorizes PG&E (Applicant) to remove (L-131 East and L-131 West) and remediate (L-131Y and L-131Z) Project-related facilities located on State-owned land. All Project-related activities would take place in Sacramento County and Solano County, California. Project work areas would be located in unincorporated Sacramento County and would include areas within Threemile Slough, and along the southern shore of Brannan Island and the northern shore of Sherman Island. Project activities in Solano County would include equipment mobilization, materials hauling, and waste disposal at existing industrial facilities and would occur on waterways and roadways that are regularly travelled by watercraft and vehicles.

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. The CSLC or its designee shall ensure that qualified environmental monitors are assigned to the Project.

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

The environmental monitor shall immediately request any deviation from the procedures identified in this MMP to CSLC staff or its designee and shall not implement the request until CSLC staff or its designee approve any 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 submitted to the Applicant, and once the Project is complete, a compilation of all the logs 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 mitigation measures for all LTSM resource areas. 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)
- **Responsible Party** (entity responsible to ensure MM compliance)
- **Timing** (Before, during, or after construction; during operation; etc.)

1.4.1 Aesthetics

***Potential Impact:* Potential for Nighttime Lighting**

MM AES-1: Mitigation Measure AES-1: Night-Lighting Minimization. If work activities extend into evening hours and night-lighting is required, Project lighting shall be as low in intensity as allowed by safety requirements and, to the extent possible, located, designed, and equipped to provide shielded and downward projected illumination onto work areas to minimize intensity and visibility of lighting from nearby areas.

Monitoring/Reporting Action: Observe nighttime lighting for compliance

Effectiveness Criteria: Lighting glare minimized

Responsible Party: PG&E and contractors

Timing: During any nighttime work

Other applicable mitigation measures for potential impacts to aesthetics

MM BIO-14: Site Restoration and Riparian Mitigation Plan

1.4.2 Air Quality

Potential Impact: **Construction Emissions**

MM AQ-1: Implement SMAQMD Basic Construction Emissions Control Practices. The following Basic Construction Emissions Control Practices (BCECPs) shall be implemented during Project construction to allow the use of SMAQMD's non-zero particulate matter significance thresholds:

- Control fugitive dust as required by District Rule 403 and enforced by District staff.
- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible track out mud or dirt onto adjacent public roads at least once a day.
- Limit vehicle speeds on unpaved roads to 15 miles per hour.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes. Provide clear signage that posts this requirement for workers at the entrances to the project site.
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation.

Monitoring/Reporting Action: Contract specifications and submittal of certificate(s) of compliance

Effectiveness Criteria: Reduced particulate matter emissions

Responsible Party: PG&E and contractors

Timing: During construction activities

1.4.3 Biological Resources

Potential Impact: **Special status plant and wildlife species**

MM BIO-1: Worker Environmental Awareness Training. Prior to the start of construction, a qualified biologist, approved by CSLC staff, shall provide worker

environmental awareness training to inform construction personnel about protected biological resources, including special status species that could occur in the Project work areas, their habitat, sensitivity to human activities, legal protections, penalties for violation of state and federal laws, information about wetlands and waters of the United States and/or State, and required Project mitigation measures and reporting requirements. The training shall include photos of special status species to aid in identification, information about how to properly clean Project personnel footwear to prevent the transfer of seeds and pathogens from non-Project work sites, the qualified biologist's contact information, and the CSLC's point of contact. All construction personnel must undergo this training before working on the Project, and a sign-in sheet shall be maintained to keep a record of those trained.

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: Prior to construction activities; during construction activities (if needed) for new hires

Potential Impact: **Special status plant species**

MM BIO-2: Special Status Plant Avoidance. 30 days before the start of construction, a qualified botanist, approved by CSLC staff, shall survey the Project impact area, following the CNPS Botanical Survey Guidelines and with consideration to prior plant surveys conducted in the work areas (see Appendix D), for the presence of special status plant species, including bristly sedge, woolly rose mallow, Delta tule pea, Mason's lilaeopsis, Delta mudwort, Antioch Dunes evening-primrose, Sanford's arrowhead, and Suisun Marsh aster species within all permanent and temporary impact areas .

If a special status plant species is discovered, it shall be flagged and the following measures shall be implemented:

- An appropriate no-disturbance buffer determined by the qualified botanist shall be established around the occurrence. Protective fencing will be installed under the guidance of the qualified botanist to delineate the no-disturbance buffer and protect the special status plant species from work impacts. Fencing will be installed before ground-disturbing work begins and remain in place until work is complete.

- If special status plant species are discovered on-site that cannot be avoided, the Applicant shall coordinate with the appropriate agencies (e.g., USFWS, CDFW) prior to the start of construction to determine and implement appropriate species-specific measures (e.g., transplantation or harvesting and planting seed, followed by success monitoring) to minimize impacts to the special status plant species.

Monitoring/Reporting Action: Pre-construction surveys and reports; implementation of additional species-specific measures (if needed)

Effectiveness Criteria: Special status species avoidance

Responsible Party: PG&E and contractors

Timing: 30 days prior to construction activities; during construction activities (if needed)

***Potential Impact:* Special status plant and wildlife species**

MM BIO-3: Biological Monitoring. A qualified biological monitor, approved by CSLC staff, shall survey the onshore work area for sensitive plant and wildlife species no more than 24 hours before the start 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 affect special status species on a daily basis once Project activity begins. If at any time during Project activities any special status species are observed within the Project area, work around the individuals' immediate area shall be stopped or work shall be redirected to an area within the Project area that would not affect these species until the individual is relocated by a qualified biologist (i.e., transplanting or harvesting of seeds for plant species, relocation for wildlife species). Listed wildlife species would be allowed to leave of their own volition, unless coordination with USFWS and/or CDFW provide authorization for relocation by a qualified biologist with appropriate handling permits. Work would resume once the individual 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 would stop work and notify the CSLC and consult with the appropriate agencies to resolve the impact before restarting work in the area.

Monitoring/Reporting Action: Submittal of observation reports to CSLC

Effectiveness Criteria: Special status species avoidance; no special status species mortality

Responsible Party: PG&E and contractors

Timing: 24 hours prior to the start of Project activities and during construction activities

Potential Impact: **Special status plant and wildlife species**

MM BIO-4: Turbidity Monitoring Plan. A Turbidity Monitoring Plan shall be implemented during all in-water work, including in-water site preparation and restoration, such as removal and replacement of large woody debris, to ensure that turbidity levels upstream and downstream of the Project area are compliant with regulatory requirements. The turbidity monitoring plan shall include requirements for assessing preconstruction (background) turbidity levels. 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. Silt curtains shall be installed around in-water work areas to contain turbidity. If the results of the turbidity monitoring plan detect a Project-related increase in turbidity outside the area contained by the silt curtains that exceeds the allowable thresholds for increased turbidity, as defined by regulatory permits, corrective measures shall be implemented. Corrective measures may include alteration to the timing and duration of in-water work, or minor modifications in methodology of Project activities to reduce the in-water excavation turbidity.

Monitoring/Reporting Action: Develop and implement a turbidity monitoring plan prior to in-river work and submit monitoring results CSLC

Effectiveness Criteria: Minimized turbidity; avoid special-status fish and aquatic species injury or mortality

Responsible Party: PG&E and contractors

Timing: Prior to and during construction activities

Potential Impact: **Special status wildlife species**

MM BIO-5: Swainson's Hawk Nesting Season Avoidance or Preconstruction Surveys. For Project activities within Swainson's hawk nesting season (March 1 to September 15), a qualified biologist, approved by CSLC staff, shall conduct preconstruction Swainson's hawk surveys no more than 72 hours before any construction disturbance. If active Swainson's hawk nests are identified near the Project area, then based on nest protection buffers outlined in PG&E's Nesting Bird Management Plan, the following measures shall be required:

- Postpone Project activities within 0.25 mile of the nest until after the young have fledged and are no longer dependent on the nest tree.
- If it is not possible to postpone Project activities, construction may only proceed with both CDFW approval and nest monitoring by a qualified raptor biologist. If the monitoring biologist observes signs of distress, then they shall have the authority to stop construction work. If the nest is abandoned because of Project-related disturbance but the nestlings are still alive, the Applicant is required to fund the nestlings' recovery, rearing in captivity, and subsequent controlled release.

Monitoring/Reporting Action: Conduct pre-construction surveys and submit survey report to CSLC and CDFW; implement buffers and monitoring (if needed)

Effectiveness Criteria: Compliance with buffers; avoidance of Swainson's hawk nesting sites

Responsible Party: PG&E and contractors

Timing: Within Swainson's hawk nesting season (March 1 to September 15); 72 hours prior to and during construction activities

Potential Impact: **Special status wildlife species**

MM BIO-6: Nesting Bird Season Preconstruction Surveys. If Project-related vegetation removal and ground-clearing activities are scheduled between February 1 and August 31, then preconstruction surveys shall be conducted no more than one week before the start of construction in potential nesting habitat within 350 feet of the Project area to identify nest sites. If an active raptor or passerine bird nest is identified, an appropriate species-specific nest protection buffer shall be recommended based on PG&E's Nesting Bird Management Plan and site-specific conditions. A preconstruction nesting survey report shall be prepared and submitted to CDFW and CSLC staff within one week of preconstruction 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.

Monitoring/Reporting Action: Conduct pre-construction nesting bird surveys and submit survey report to CSLC and CDFW; implement buffers (if needed)

Effectiveness Criteria: Compliance with buffers (if needed); avoidance of bird nesting sites

Responsible Party: PG&E and contractors

Timing: Within nesting bird season (February 1 and August 31); no more than one week before the start of construction and during construction activities

Potential Impact: **Special status wildlife species**

MM BIO-7: Roosting Bat Avoidance. No more than one week prior to the start of construction, a qualified biologist, approved by CSLC staff, shall identify potentially suitable bat roosting habitat features (e.g., trees with dense foliage, cavities and/or peeling bark, structural cavities, tall shrubs, bridges, buildings, abandoned bird nests) in the work area before the initiation of construction and maintenance activities. Suitable habitat features will be inspected during the preconstruction survey in advance of clearing, grubbing, construction, and maintenance activities, or other activities with potential to disturb roosting bats in applicable work areas, to verify that roosting bats are absent. If evidence of use by roosting bats is detected during the survey, the qualified biologist shall conduct a focused nighttime emergence survey as needed. The preconstruction survey will determine (1) locations of active bat roosts, species identification (if possible), and approximate count of individuals; (2) identification of potential direct and indirect Project-related disturbing activities; and (3) a description of protective measures to be implemented before and during construction or operation to avoid impacts on roosting bats. If a special status bat species or a maternity colony that may be disturbed by Project activities is identified, CDFW will be notified by CSLC and any recommendations on appropriate work area buffers will be followed. If an active maternity roost is found in an area that would be affected by Project or maintenance activities, then activities with potential to disturb the colony shall be initiated outside of the maternity season (April 15 to August 31), or until young are volant (e.g., capable of flight), or the colony is no longer active.

If the preconstruction survey indicates no evidence or observation of use by roosting bats, no further action is required, and construction may begin at the direction of the qualified biologist.

Monitoring/Reporting Action: Conduct pre-construction roosting bat surveys and submit survey report to CSLC; consult with CDFW and implement buffers (if needed)

Effectiveness Criteria: Compliance with buffers; avoidance of bat roosting sites

Responsible Party: PG&E and contractors

Timing: No more than one week prior to the start of construction activities and immediate follow-up focused nighttime emergence survey if roosting bats are detected

Potential Impact: **Special status wildlife species**

MM BIO-8: Giant Garter Snake Work Window and Preconstruction Surveys. Project activities shall be conducted during the GGS active season (May 1 to October 1) to the extent practicable. A qualified biologist, approved by the CSLC, shall conduct a survey and identify where exclusion fencing is needed within the Project area. If needed, a solid exclusion fence shall be installed around the perimeter of work sites and shall be inspected weekly.

If work will be conducted during the inactive period (October 2 to April 30), then the Applicant shall conduct preparation work during the snake's active period to make construction areas ready for work during the inactive season. Preparation work shall comply with the MRHCP. If GGS are encountered during construction activities, snakes shall be allowed to move away from construction activities, or if relocation is required, a permitted biologist with USFWS and CDFW approval shall follow approved handling protocols and move snakes to the nearest appropriate habitat out of harm's way.

Monitoring/Reporting Action: Conduct pre-construction survey and submit survey report to CSLC; USFWS/CDFW notification of relocation (if needed)

Effectiveness Criteria: Exclusion fencing in place; GGS relocated as needed; avoid GGS mortality

Responsible Party: PG&E and contractors

Timing: Prior to and during construction activities

Potential Impact: **Special status wildlife species**

MM BIO-9: Northwestern Pond Turtle (NPT) Preconstruction Surveys. A qualified biologist, approved by the CSLC, shall conduct preconstruction surveys for NPT and their nests 48 hours before ground disturbance to ensure that individuals are not present in the work area. Prior to ground disturbance activities, a barrier, such as wildlife exclusion fencing, shall be placed around the excavation area to prevent NPT 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 affect special status species. Should NPT be found within the work areas, a qualified biologist in consultation with CDFW

shall relocate the species outside of work area barriers. If NPT nests are identified, an appropriate nest protection buffer shall be recommended for CDFW approval based on site specific conditions. Construction activities shall be prohibited within the established buffer zone until the hatchlings emerge.

Monitoring/Reporting Action: Conduct pre-construction survey and submit survey report to CSLC; CDFW notification of relocation (if needed)

Effectiveness Criteria: Exclusion fencing in place; implement buffers (if needed); NPT relocated as needed; avoid NPT mortality

Responsible Party: PG&E and contractors

Timing: 48 hours prior to ground disturbance and during construction activities

Potential Impact: **Special status wildlife species**

MM BIO-10: Elderberry Shrub Avoidance Buffers. When ground-disturbing activities will be implemented within 20 feet of blue elderberry, a qualified biologist, approved by CSLC staff, will identify a work exclusion zone (i.e., 5 to 20 feet of the dripline of all blue elderberry shrubs, depending on the size of the shrub), with pin flagging or other appropriate means, within which ground disturbance, tree felling, and equipment and vehicle operation will be avoided or minimized. Except for cut stump treatment of removed trees (non-elderberry), herbicides will not be used within this zone.

Monitoring/Reporting Action: Observe elderberry shrub buffers and submit observation reports

Effectiveness Criteria: Compliance with buffers; avoidance of elderberry shrubs

Responsible Party: PG&E and contractors

Timing: Prior to and during construction activities

Potential Impact: **Special status wildlife species**

MM BIO-11: Elderberry Shrub Trimming. If trimming blue elderberry shrub is determined to be necessary, all trimming will occur in compliance with PG&E's Multi-Region Habitat Conservation Plan (MRHCP). Trimming of branches and stems less than 1 inch will occur between June 1 and February 28/29. Stems greater than 1 inch will be avoided to the greatest extent practicable. If stems greater than 1 inch are required to be removed, these activities will be overseen and documented by a qualified biologist, approved by CSLC staff, in compliance with the MRHCP and the Valley Elderberry Longhorn Beetle Habitat

Impact Report Field Form and included in the MRHCP annual report for the purposes of impact and mitigation tracking. Compensatory mitigation is provided for permanent impacts on the VELB in accordance with the MRHCP Conservation Strategies.

Monitoring/Reporting Action: Provide Impact Report Field Form

Effectiveness Criteria: Compliance with MRHCP and habitat conservation

Responsible Party: PG&E and contractors

Timing: During construction activities; during and after any elderberry shrub trimming activities

Potential Impact: **Special status fish species**

MM BIO-12: In-Water Work Window. In-water work will be conducted during the seasonal work window of August 1 through October 31 (July 1 through October 31 for salmonids; August 1 through November 30 for smelt; combined work window of August 1 through October 31 for salmonids and smelt) to avoid and/or minimize potential adverse effects to listed fish. This work window will avoid the spawning period for delta smelt and longfin smelt, and the juvenile emigration period for Chinook salmon and steelhead. If an extension to the work window is needed, the seasonal work window may be extended to November 30, with authorization from the National Marine Fisheries Service, if the authorization does not require formal Section 7 ESA consultation, a take permit, or additional mitigation measures.

Monitoring/Reporting Action: Documentation of compliance; consultation with National Marine Fisheries Service (if needed)

Effectiveness Criteria: No associated special status fish and aquatic species injury or mortality

Responsible Party: PG&E and contractors

Timing: During construction activities

Potential Impact: **Special status fish species**

MM BIO-13: HACCP and Decontamination Plan. A Hazard Analysis Critical Control Point (HACCP) and Decontamination Plan must be developed to prevent the spread of golden mussels and invasive aquatic plants during Project activities and shall be submitted to CSLC staff for review and approval at least 30 days prior to the start of Project activities. The HACCP and Decontamination Plan shall outline Project activities, describe all in-water equipment, identify

potential pathways for the spread of aquatic invasive species, and include methods to prevent the movement of species and for decontamination, as applicable. Possible decontamination methods could include:

- Spray the work skiff and crew transport vessel (see Section 2.2.3) and in-water equipment, including submersible excavation pump, wet suits, masks, and snorkels, with hot water (greater than 140 degrees Fahrenheit) for at least 10 seconds (Comeau et al. 2011; Morse 2009).
- Freeze in-water gear such as masks, snorkels, and wet suits at less than minus 5 degrees Fahrenheit for at least 5 hours (McMahon et al. 1993).
- Use a quaternary ammonium compound solution to soak in-water gear for at least 10 to 15 minutes (Britton and Dingman 2011).
- Move Project barges to full salinity water (at least 30 parts per thousand) for at least 36 hours post-Project activities to kill any attached golden mussels, if present.

All construction personnel must review and sign the HACCP and Decontamination Plan, as well as be given training on identification of potential invasive species in Project work areas and implementation of watercraft inspection and decontamination protocols before the start of work.

Monitoring/Reporting Action: Develop plan and submit to CSLC for review; signatures of employees for compliance; certificates of training from employees for compliance

Effectiveness Criteria: Prevention of the spread of golden mussels

Responsible Party: PG&E and contractors

Timing: 30 days prior to the start of Project activities; during construction activities (if needed) for new hires

Potential Impact: **Riparian habitat and sensitive natural communities**

MM BIO-14: Site Restoration and Riparian Mitigation Plan. A Site Restoration and Riparian Mitigation Plan (Plan) shall be developed to provide for the replacement of riparian vegetation damaged or removed from Project work areas due to Project activities. The Plan shall be submitted to the CSLC and the agencies with jurisdiction (California Department of Fish and Wildlife, California Department of Parks and Recreation and, if applicable, any flood control agencies with jurisdictional authority over restoration of the Sherman Island levee) for review and approval at least 30 days before the start of construction.

The Plan shall provide for restoration of the vegetative components of the work areas to pre-Project conditions to the extent feasible and establish performance criteria and monitoring to ensure timely restoration to pre-Project conditions, subject to approval by levee authorities for consistency with adopted plans of flood control. If replacement of trees and large woody shrubs is restricted onsite for consistency with levee authority requirements or other constraints, off-site replacement of trees and large woody shrubs shall be required.

The Plan shall require that all woody vegetation, including native willows, blue elderberry shrubs, and coast live oak trees removed from both the Sherman Island and Brannan Island SRA work areas for construction of the Project be replanted at a 3:1 mitigation ratio within an established riparian restoration area within state-owned property at the Brannan Island SRA. Tree plantings, such as locally collected willow cuttings, nursery stock seedlings, and/or container plants (minimum 1-gallon size for elderberry shrubs and minimum 5-gallon size for live oaks), would be installed in riparian restoration areas located above the restored rock slope protection and/or mean high tide line. The Plan shall detail an appropriate native herbaceous riparian seed mix to be hydro-seeded on the disturbed levee surface within the Sherman Island work area, where replanting woody vegetation is not feasible, as well as requirements for monitoring to ensure adequate growth is established. The riparian seed mix shall also be applied to riparian restoration areas on Brannan Island to ensure surface coverage of disturbed areas.

The Plan shall also include measures for reuse of existing topsoil to preserve roots, rhizomes, and seedbank material, performance monitoring to ensure successful revegetation, and if applicable, any temporary irrigation methods that will facilitate site restoration.

Monitoring/Reporting Action: Develop plan and submit to CSLC and other applicable agencies for review and approval; submittal of performance monitoring results

Effectiveness Criteria: Restoration of disturbed habitats

Responsible Party: PG&E and contractors

Timing: 30 days prior to the start of construction activities and at the completion of construction activities

***Potential Impact:* Riparian habitat and sensitive natural communities**

MM BIO-15: Riparian Habitat Protection Measures. On Sherman Island, the construction staging work space boundary shall have a minimum 50-foot setback from top of bank on the northeast side of the existing ditch to ensure avoidance of impacts to riparian vegetation. The 50-foot setback boundary shall be demarcated in the field to identify the boundary. No construction staging activities shall occur within the 50-foot setback.

Along the landside levee slope within the Sherman Island construction staging boundary, all parking, access, operation, and maintenance of vehicles, heavy equipment, and construction materials shall be limited to existing dirt roads and established vehicle parking areas, including pull out parking areas along Sherman Island East Levee Road. The work space boundary shall not extend landward of the levee toe, and work activities along the unimproved landside levee slope and levee toe boundary shall be limited to mowing of herbaceous vegetation (an existing levee maintenance activity), construction fencing, and stormwater and erosion control activities, such as installation of silt fencing, fiber rolls, etc., to contain and separate the work space boundary from the adjacent riparian vegetation.

Monitoring/Reporting Action: Submit proof of compliance to CSLC (i.e. photos and compliance report)

Effectiveness Criteria: Avoidance of riparian and sensitive natural habitats

Responsible Party: PG&E and contractors

Timing: Prior to and during construction activities

***Potential Impact:* Critical habitat and essential fish habitat**

MM BIO-16: Replacement of In-Water Woody Debris. If in-water large woody debris is removed during site preparation activities (e.g., downed logs and other woody debris identified during pre-construction debris surveys of the in-water remediation and pipeline removal work areas), the woody debris will be stockpiled within an onshore work space area, and at the completion of Project construction activities, shall be placed (reused) at an in-water location for replacement of habitat in accordance with the approved Lake and Streambed Alteration Agreement with California Department of Fish and Wildlife.

Monitoring/Reporting Action: Submit proof of compliance to CSLC (i.e. photos and compliance report)

Effectiveness Criteria: Replacement of in-water woody debris

Responsible Party: PG&E and contractors

Timing: During and following construction activities

Other applicable mitigation measures for potential impacts to biological resources

MM HAZ-1: Project Work and Safety Plan and **MM HYDRO-1: Stormwater Pollution Prevention Plan**

1.4.1 Cultural Resources/ Cultural Resources – Tribal

Potential Impact: **Buried Archaeological Deposits**

MM CUL-1/TCR-1: Discovery of Previously Unknown Cultural or Tribal Cultural Resources. If any potential tribal cultural resources, archaeological resources, or other cultural resources are discovered by the designated on-site archaeologist, the Tribal Monitor(s) from the United Auburn Indian Community (UAIC), other monitor(s) if requested by an affected tribe, or other Project personnel during construction activities, all work shall cease within 100 feet of the find or an agreed-upon distance based on the Project area and the nature of the find. The work stoppage shall remain in place until (a) the PG&E cultural resource specialist, the designated on-site archaeologist, and the Tribal Monitor(s) have jointly determined the nature of the discovery and (b) either the archaeologist/cultural resources specialist (for cultural resources) or the Tribal Monitor(s) (for tribal cultural resources) has determined the significance of the discovery. Tribal cultural resources shall not be photographed or 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 will be established using fencing or other suitable material to protect the discovery during subsequent investigation. No ground-disturbing activities will be permitted within the Environmentally Sensitive Area until the area has been cleared for construction. The exact location of the resources within the Environmentally Sensitive Area must be kept confidential, and measures shall be taken to secure the area from site disturbance and potential vandalism. Impacts on previously unknown significant cultural and tribal cultural resources shall be avoided through preservation in place if feasible.

If the on-site archeologist or Tribal Monitor(s), 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 that 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: Monitor ground disturbance and establish exclusion zone (if found)

Effectiveness Criteria: Identification and protection of unknown cultural or tribal cultural resources (if present)

Responsible Party: PG&E and contractors

Timing: During construction activities

Potential Impact: **Disturbance of Human Remains**

MM CUL-2/TCR-2: 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 the 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), the Applicant, and the 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 (California Government Code §6250 et seq.).

Monitoring/Reporting Action: Notifications/Consultations with County Coroner and NAHC (if applicable) and submittal of related materials to CSLC

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

Responsible Party: PG&E and contractors

Timing: During construction activities

1.4.2 Geology, Soils, and Paleontological Resources

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

MM BIO-14: Site Restoration and Riparian Mitigation Plan, MM HAZ-1: Project Work and Safety Plan, and MM HYDRO-1: Stormwater Pollution Prevention Plan

1.4.3 Greenhouse Gas Emissions

Applicable mitigation measures for potential impacts to greenhouse gas emissions

MM AQ-1: Implement SMAQMD Basic Construction Emissions Control Practices

1.4.4 Hazards and Hazardous Materials

Potential Impact: **Hazardous Materials**

MM HAZ-1: Project Work and Safety Plan. A Project Work and Safety Plan (PWSP) shall be developed and submitted to CSLC staff, as well as any other pertinent agencies, for review and approval at least 30 days prior to the start of Project activities. The PWSP shall include the following (at a minimum):

- Contact Information
- Summary of the Project Execution Plan
- Emergency response plans
- Site safety plan, including measures for proper transportation, storage, and handling of hazardous materials during all stages of Project construction (including mobilization and demobilization)
- Critical Operations and Curtailments Plan
- Marine safety and anchoring plan
- Diving safety plan

- Hazardous Spills Response and Contingency Plan, which shall include details about the following:
    - Secondary containment: All hazardous materials (fuels, lubricants) shall be stored in a dedicated staging area with secondary containment (e.g., berms or spill pallets) capable of holding 110% of the largest container's volume
    - Refueling protocols: No refueling shall occur within 100 feet of the Threemile Slough bank or any active drainage.
    - Spill Clean-Up and Kits: "Type II" spill kits (absorbent pads, booms, and neutralizers) shall be maintained at each work area and on every service truck.
    - Plan for waste disposal of any hazardous materials

Monitoring/Reporting Action: CSLC review and approval of PWSP and CSLC approved monitor to ensure compliance

Effectiveness Criteria: Reduced risks of water or soil contamination

Responsible Party: PG&E and contractors

Timing: 30 days prior to the start of construction and during construction activities

Potential Impact: **Upset and accident conditions with hazardous materials**

MM HAZ-2: Asbestos Exposure Minimization. Construction personnel shall be informed of the potential presence of asbestos-containing material (ACM) at the Project area prior to their assignment. After exposing the existing pipeline for removal, and prior to the start of cutting and removal 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 abated by a certified asbestos abatement contractor in accordance with the regulations and notification requirements of SMAQMD Rule 902 and in accordance with applicable worker safety regulations. All ACM removed from the pipeline segment shall be labeled, transported, and disposed of at a verified and approved ACM disposal facility. Sections of pipe or other waste will be transported to a recycling facility if the results of characterization indicate that recycling is feasible.

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

Effectiveness Criteria: Proper containment of asbestos-containing material

Responsible Party: PG&E and contractors

Timing: During construction activities

Potential Impact: **Upset and accident conditions with hazardous materials**

MM HAZ-3: Soil Testing and Disposal. In the event that soils or groundwater are suspected of being contaminated (indicated by visual, olfactory, or other evidence) and are removed during site-grading activities or excavation activities, site activities will cease until the excavated soil is tested for contaminants. If the excavated soil is contaminated above permissible regulatory hazardous waste levels, the soil will be contained and disposed of at a licensed waste facility. The presence of known or suspected contaminated soil will require testing and investigation procedures to be supervised by a qualified person, as appropriate, to meet State and federal regulations.

Monitoring/Reporting Action: Inspections and testing (if necessary) for contaminated soil and groundwater and submittal of lab report results to CSLC, with abatement plan if required

Effectiveness Criteria: Proper containment of contaminated soil and groundwater

Responsible Party: PG&E and contractors

Timing: During construction activities

Potential Impact: **Upset and accident conditions with hazardous materials**

MM HAZ-4: Bathymetric Surveys. Pre- and post-Project bathymetric and surficial features multi-beam debris surveys of the riverbed shall be conducted using a vessel equipped with a multibeam sonar system or equivalent method acceptable to the CSLC. 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. A copy of the survey shall be submitted to CSLC staff for review 30 days before Project implementation. A post-Project bathymetric and surficial features multi-beam debris survey shall also be performed after Project activities are complete, and the results shall be 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 would be positively identified using methods such as divers or ROV. All Project-related debris will be recovered. A Project close-out report with drawings shall be submitted to CSLC staff within 60 days of Project 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: 30 days prior to Project activities and within 60 days following Project completion

Other applicable mitigation measures for potential impacts to hazards and hazardous materials

MM HYDRO-1: Stormwater Pollution Prevention Plan and **MM TRA-1: Traffic Control Plan (Terrestrial)**

1.4.5 Hydrology and Water Quality

***Potential Impact*: Violation of water quality standards**

MM HYDRO-1: Stormwater Pollution Prevention Plan. PG&E or its designated contractor shall develop and implement a Stormwater Pollution Prevention Plan (SWPPP) consistent with the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ). At a minimum, the SWPPP shall include measures to:

- Provide adequate soil moisture levels to prevent excessive fugitive dust emissions, while also not contributing to conditions of runoff.
- To the extent possible, preserve existing vegetation and effective soil cover (e.g., through use of geotextiles, straw mulch, hydroseeding) for inactive areas and finished slopes to prevent sediment from being dislodged by wind, rain, or flowing water. Specific areas identified for avoidance will be determined based on biological surveys (per Mitigation Measure BIO-2), feasibility, and other factors.
- Install and maintain erosion control materials, such as straw wattles, coir fiber rolls, or similar devices; provide sediment basins, as needed

(depending on site conditions) to capture soil, silt, and sediment that could be mobilized through construction activity.

- Establish and enforce measures such as designating areas for construction vehicle storage, maintenance, and fueling an adequate distance from wetlands and surface waters, maintain proper handling procedures for hazardous materials, and waste management Best Management Practices (such as daily trash removal and covering debris bins) to provide procedural and structural measures to prevent the release of pollution, wastes, and materials used at the construction site.

The SWPPP shall also detail 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. The SWPPP shall be provided to Commission staff a minimum of 30 days before Project implementation.

Monitoring/Reporting Action: SWPPP submitted to CSLC for review and observation reports

Effectiveness Criteria: Minimized erosion, siltation, and turbidity

Responsible Party: PG&E and contractors

Timing: 30 days prior to Project activities and during construction activities

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

MM BIO-4: Turbidity Monitoring Plan, **MM BIO-14: Site Restoration and Riparian Mitigation Plan**, **MM HAZ-1: Project Work and Safety Plan**, **MM HAZ-3: Soil Testing and Disposal**, and **MM HAZ-4: Bathymetric Surveys**

1.4.6 Recreation

Potential Impact: **Recreation facilities and activities**

MM REC-1: Construction Noticing and In-Water Safety Measures.
Prior to work activities at Brannan Island SRA, the Applicant or its designated contractor shall coordinate with SRA staff to develop and post information at Brannan Island SRA concerning Project work locations, times, and other details of activities that may preclude recreational use of those work areas. At all times, while Project activities are taking place at Brannan Island SRA, signage shall be available to recreational users at the SRA to provide notice to the public that Project activities are taking place and to exercise caution.

Prior to in-water activity, PG&E or its designated contractor shall post information at all local marinas and launch facilities concerning Project work locations, times, and other details of activities that may pose hazards to recreational boaters. At all times while Project activities are taking place in Threemile Slough, warning signs and buoys shall be installed 500 feet upstream and downstream of the work site to provide notice to the public that Project activities are taking place and to exercise caution. The warning buoys shall also designate a vessel speed limit of 5 miles per hour in Project work areas. Additionally, 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 Project implementation (in-water work). The Notice shall include:

- Type of operation (i.e., 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: Documentation of compliance and publication of notice

Effectiveness Criteria: Reduction of potential impact to recreationists

Responsible Party: PG&E and contractors

Timing: Prior to and during construction activities

1.4.7 Transportation

***Potential Impact:* Traffic and Emergency Access**

MM TRA-1: Traffic Control Plan (Terrestrial). Prior to commencement of Project activities, a traffic control plan shall be submitted to the Commission for review and approval. It shall include measures to reduce Project-related traffic congestion at SR 160 and Sherman Island East Levee Road and will address construction staging of equipment within Project roadways and any resulting lane closures. The plan shall include appropriate signage, traffic cones, and

flaggers to reduce potential hazards to motorists and workers during the Project and reduce potential conflicts with emergency access.

Upon approval, the traffic control plan shall be submitted to the County of Sacramento, and an encroachment permit will be obtained for construction activities within County maintained roadways.

Monitoring/Reporting Action: Submission of a traffic control plan to CSLC for review, obtainment of an encroachment permit from the County of Sacramento

Effectiveness Criteria: Minimized risks with associated traffic congestion and vehicle conflicts

Responsible Party: PG&E and contractors

Timing: Prior to and during construction activities

Other applicable mitigation measures for potential impacts to transportation

MM REC-1: Construction Noticing and In-Water Safety Measures

1.4.8 Utilities and Service Systems

Applicable mitigation measures for potential impacts to utilities and service systems

MM HAZ-2: Asbestos Exposure Minimization

1.4.9 Wildfire

Applicable mitigation measures for potential impacts to wildfire

MM HAZ-1: Project Work and Safety Plan and **MM TRA-1: Traffic Control Plan (Terrestrial)**