

Chapter 5

Applicant's Proposed Measures

As part of PG&E's standard construction practices and to avoid or minimize impacts, PG&E has incorporated applicant-proposed measures (APMs) into the project design. These APMs are included in the respective resource section, and a complete list is found below.

Implementation of the proposed APMs will ensure that all potential project-related impacts will be avoided or less than significant. No additional mitigation is required.

Aesthetics

APM AES-1: LIMIT CONSTRUCTION TO DAYLIGHT HOURS AS FEASIBLE.

Construction activities that are visible to the public and scheduled to occur after 6:00 p.m. or on weekends should not continue past daylight hours (which vary according to season) unless required because of project safety concerns or clearance requirements. This will reduce the amount of construction activities visible to viewer groups because most construction activities will occur during business hours (when most viewer groups are likely at work), and daylight construction will eliminate the need to introduce high-wattage lighting sources to be able to operate in the dark.

Agriculture

APM AG-1: COMPENSATE FOR REDUCED AGRICULTURAL PRODUCTION AND LOSS OF USE.

PG&E will offer appropriate compensation for land held in private ownership as part of the acquisition of temporary construction easements or permanent utility easements. PG&E will compensate property owners for removal of any structures, crops, or agriculture-related improvements required to construct the project. PG&E will negotiate easements with private landowners for the temporary or permanent use of agricultural areas. Upon completion of the

project, the areas will be left as specified in the individual agreements. In addition, PG&E will prepare a SWPPP (see APM HYDRO-1 [Prepare and implement a Storm Water Pollution Prevention Plan] in Section 4.8, “Hydrology”) to ensure that areas affected by construction are restored to pre-construction conditions.

Air Quality

APM AIR-1: IMPLEMENT MBUAPCD MITIGATION MEASURES FOR CONSTRUCTION FUGITIVE DUST EMISSIONS.

PG&E will implement all applicable and feasible fugitive dust control measures required by MBUAPCD. This requirement will be incorporated into the construction contract. These measures include:

- Water all active construction sites at least twice daily. Frequency of watering should be based on the type of operation, soil, and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 mph).
- Haul trucks will maintain at least 2’0” of freeboard.
- On-site vehicles will be limited to a speed on unpaved roads that minimizes dust emissions.
- Cover all trucks hauling dirt, sand, or loose materials.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Sweep streets if visible soil material is carried out from the construction site.
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person will respond and take corrective action within 48 hours. The phone number of the MBUAPCD also will be visible to ensure compliance with Rule 402 (Nuisance).
- Limit the area under construction at any one time as feasible.

APM AIR-2: IMPLEMENT BMPs TO REDUCE CONSTRUCTION TAILPIPE EMISSIONS.

PG&E will implement all applicable and feasible measures to reduce tailpipe emissions from diesel-powered construction equipment. This requirement will be incorporated into the construction contract. These measures include:

- Maximize use of diesel construction equipment meeting CARB’s 1996 or newer certification standard for off-road heavy-duty diesel engines.

- Use emission control devices at least as effective as the original factory-installed equipment.
- Maintain all diesel-powered equipment in a manner to minimize visible soot emissions.
- Locate stationary diesel-powered equipment and haul truck staging areas as far as practicable from sensitive receptors.
- Minimize unnecessary idling time through application of a “common sense” approach to vehicle use, so that idling is reduced as far as possible below the maximum of 5 consecutive minutes required by California law—if a vehicle is not required immediately or continuously for construction activities, its engines will be shut off. Construction foremen will include briefings to crews on vehicle use as part of pre-construction conferences. Those briefings will include discussion of a “common sense” approach to vehicle use.
- Use ground equipment in place of helicopters where practicable.

APM AIR-3: MINIMIZE GREENHOUSE GAS EMISSIONS DURING CONSTRUCTION.

PG&E or its contractors will implement the following measures during construction to reduce greenhouse gas emissions:

- Encourage construction workers carpooling to the job site to the extent feasible.
- Encourage recycling of construction waste where feasible.
- Minimize welding and cutting by using compression of mechanical applications where practical and within standards.
- Encourage use of natural gas-powered vehicles for passenger cars and light-duty trucks where feasible and available.
- Minimize construction equipment exhaust by using low-emission or electric construction equipment where feasible.

Biological Resources

APM BIO-1: CONDUCT AN ENVIRONMENTAL TRAINING AND MONITORING PROGRAM FOR CONSTRUCTION CREWS BEFORE BEGINNING CONSTRUCTION.

An Environmental Training and Monitoring Program for construction crews will be conducted before beginning construction and will be ongoing during construction activities for new crew members. The education program will include information about the federal and state Endangered Species Acts, the consequences for noncompliance with environmental laws, identification of special-status plant and wildlife species and wetland habitats, and review of mitigation measures. (Also see APM HYDRO-2 [Develop and implement a Spill Prevention Control and Countermeasure Plan], which requires communicating environmental concerns and appropriate work practices, including spill prevention, emergency response measures, and applicable BMPs, to all construction personnel in an Environmental Training and Monitoring Program.)

APM BIO-2: RESTRICT VEHICLES TO ESTABLISHED ROADWAYS AND APPROVED ACCESS ROUTES AND STAGING AREAS.

APM BIO-3: RETAIN AN ENVIRONMENTAL MONITOR ONSITE DURING CONSTRUCTION ACTIVITIES NEAR SENSITIVE HABITAT.

An environmental monitor will be onsite during any construction activity near sensitive habitat to ensure implementation of, and compliance with, APMs. The monitor will have authority to stop construction activities and develop alternative work practices, in consultation with construction personnel and resources agencies, if construction activities are likely to impact special-status species or other sensitive biological resources.

APM BIO-4: SET BACK STAGING AREAS FROM WATERBODIES TO AVOID IMPACTS ON RIPARIAN HABITAT.

Staging areas will be set back at least 50 feet from streams, creeks, or other water bodies to avoid impacts on riparian habitat.

APM BIO-5: CONTACT THE ENVIRONMENTAL MONITOR IF SPECIAL-STATUS SPECIES ARE LOCATED.

If construction personnel observe special-status species within the work area prior to, or during construction activities, construction personnel will contact the environmental monitor. The monitor will notify PG&E contacts via an established communication protocol that will be developed prior to the start of

construction. The USFWS Biological Opinion will state agency notification protocols should a federally-listed species be observed within the work area.

APM BIO-6: COMPLETE PHOTODOCUMENTATION OF SENSITIVE HABITAT CONDITIONS BEFORE BEGINNING AND IMMEDIATELY AFTER COMPLETING CONSTRUCTION ACTIVITIES.

Photodocumentation of preconstruction habitat conditions will occur at all construction locations within sensitive habitats prior to the start of construction and immediately after completing construction activities.

APM BIO-7: PROHIBIT TRASH, FIREARMS, AND PETS IN THE PROJECT AREA DURING CONSTRUCTION.

Additional APMs (identified below) to avoid and minimize specific potential impacts to biological resources will be implemented as necessary to reduce potentially significant impacts. In some cases, conducting preconstruction surveys to determine the presence or absence of special-status plant and wildlife species within the project area and subsequent avoidance of identified resources will avoid significant impacts. Due to the extent of the project, however, specific project components—such as grading new access roads and digging new tower footings—will affect areas where the presence of special-status species is presumed based on occurrence of suitable habitat, CNDDDB occurrences in relation to the project area, or results of prior biological resource assessment surveys.

APM BIO-8: RESTORE UPLAND AND RIPARIAN HABITAT TYPES TEMPORARILY DISTURBED DURING CONSTRUCTION.

Following construction, PG&E will restore upland and riparian habitat types temporarily disturbed during construction. As part of a Habitat Mitigation Plan (HMP) developed for the project, a list of specific actions necessary to restore habitats disturbed onsite will be prepared by a qualified biologist prior to construction. While some habitats in the project area may require minimal restoration actions, such as restoration of the topography and topsoil following construction, the HMP will detail the specific measures necessary for each habitat and area disturbed to ensure that the functions and values of the disturbed habitat are restored.

APM BIO-9: IMPLEMENT SUDDEN OAK DEATH PREVENTATIVE MEASURES WHEN TRIMMING OR REMOVING OAK TREES.

PG&E will implement BMPs to control the potential introduction or spread of sudden oak death when trimming or removing trees as part of the project. At a minimum, the BMPs will include the following measures:

- All debris from host species (wood, branches, and chips) shall be left onsite following trimming.
- All tools used to perform the work shall be disinfected before leaving infested areas.

APM BIO-10: AVOID IMPACTS TO PROTECTED TREES, TRACK PROTECTED TREES REMOVED DURING CONSTRUCTION, AND MITIGATE FOR IMPACTS TO PROTECTED TREES.

- PG&E will avoid impacts to protected trees to the extent feasible. If avoidance is not feasible, PG&E will track the trees removed, including their species and size, and will replace protected trees as stipulated in applicable local regulations. To avoid removal of active nests, tree trimming, vegetation removal, and removal of towers should be conducted during the non-breeding season (August 16–March 1).

APM BIO-11: IMPLEMENT GENERAL PROTECTION MEASURES FOR WATERS OF THE UNITED STATES.

During construction, PG&E will implement the following measures to minimize or avoid impacts on waters of the United States:

- Establish exclusion zones and minimize the amount of area disturbed to the minimum amount necessary to complete the work. Align work areas to avoid wetland areas and margins as much as feasible.
- Delineate wetland areas, and restrict construction personnel and equipment from entering fenced protected areas.
- Conduct all fueling of vehicles, equipment, and helicopters at least 100 feet from wetlands and other waterbodies.
- To the extent feasible, complete road construction adjacent or within waters of the United States during the dry season. If it is not feasible to complete road construction work during the dry season, PG&E will use appropriate erosion control measures for the site that will be identified in the SWPPP (see APM HYDRO-1 in Section 4.8).

APM BIO-12: DEVELOP A WETLANDS MITIGATION PLAN.

PG&E will develop a wetlands mitigation plan to offset effects to waters of the United States, including wetlands. The plan will be developed in consultation with the Corps and will include, at a minimum, plans for restoration of any temporarily disturbed wetlands and other waters of the United States and methods to achieve mitigation for permanent impacts at a minimum ratio of 1:1. Mitigation may include onsite restoration and improvement of existing wetlands or other offsite compensation.

APM BIO-13: COMPLETE SPRING SURVEYS FOR SPECIAL-STATUS PLANTS IN ALL UNSURVEYED DISTURBANCE AREAS.

Prior to construction, a qualified botanist will complete spring surveys for special-status plants at all unsurveyed staging areas, helicopter landing areas, and new access roads to determine the presence or absence of special-status plants. The surveys should be completed by qualified botanists and should be conducted during the appropriate period(s) necessary to observe special-status plants known to occur in the region.

APM BIO-14: AVOID IMPACTS ON SPECIAL-STATUS PLANTS.

PG&E will, under the direction of a qualified botanist and to the extent possible, adjust the location of staging areas, pull sites, helicopter landing areas, access roads, and other project components to completely avoid impacts on Pajaro manzanita and other special-status plants that are discovered prior to or during construction. If this avoidance measure is not feasible, PG&E will implement APM BIO-15 (Minimize impacts on special-status plants) and APM BIO-16 (Restore habitat for special status plants disturbed during construction).

APM BIO-15: MINIMIZE IMPACTS ON SPECIAL-STATUS PLANTS.

Avoidance areas will be clearly staked and flagged in the field by a qualified botanist prior to construction. If Pajaro manzanita and other special-status plants cannot be avoided during construction, PG&E will minimize impacts by reducing the work area to the smallest area necessary to complete the work. Where temporary disturbance is necessary, PG&E will conduct project activities and necessary ground disturbance in a manner that is consistent with the successful reestablishment of the species to the extent feasible. The specific actions necessary will depend on the biology of the species in question; however, the actions will be designed to ensure successful reestablishment of the species following temporary disturbance. As part of an HMP, a list of specific actions will be prepared by a qualified botanist prior to construction that will include onsite restoration actions, or reseeding plans specific to any impacted construction areas (described below in APM BIO-16).

To minimize impacts to Pajaro manzanita, which is already known to occur in the project area, PG&E will implement the following measures:

- Vegetation clearing in occupied Pajaro manzanita habitat should be conducted after Pajaro manzanita has set seed and before flowering begins (typically between May and November).
- If mechanical brushing is conducted in occupied Pajaro manzanita habitat, mastication implements should not come within 6 inches of the ground surface to avoid disturbing the seed bank.

- Where feasible, removal of entire Pajaro manzanita plants from the ground should be avoided.

The Environmental Training and Monitoring Program (see APM BIO-1) will also include information on the location of special-status plants in the project area and the measures that will be implemented to avoid or minimize impacts on the plants.

APM BIO-16: RESTORE HABITAT FOR SPECIAL-STATUS PLANTS DISTURBED DURING CONSTRUCTION.

If impacts on special status plants are unavoidable, PG&E will develop a special-status plant restoration plan as part of the HMP and in consultation with CDFG. The specific actions necessary will depend on the biology of the species in question and the type of impact (i.e., temporary or permanent); however, the actions will be designed to ensure successful reestablishment of the species following disturbance. The plan will be prepared by a qualified botanist prior to construction and will indicate when and where the actions will be implemented during construction.

APM BIO-17: IMPLEMENT MANAGEMENT PRACTICES TO CONTROL THE INTRODUCTION AND SPREAD OF INVASIVE PLANTS.

Prior to construction, PG&E will identify the location of noxious weed species of concern within areas that will be disturbed as part of the project. Appropriate management practices will be designed by a botanist and implemented during construction to reduce the likelihood of spreading already established weeds into new areas or increasing their abundance, and of introducing new weed species to the project area. Actions to prevent noxious weed establishment will be described within the HMP and will be consistent with PG&E's draft Invasive Plant Management Strategy. The project SWPPP will include BMPs such as using construction equipment that has been cleaned of soil and plant parts, including seeds, before entering the project area and using weed-free straw for erosion control. Disturbed areas will be revegetated with appropriate locally based native seed mixes. Implementing the management practices described above will reduce potentially significant impacts related to non-native invasive plants to a less-than-significant level.

APM BIO-18: IMPLEMENT AVOIDANCE AND MITIGATION MEASURES OUTLINED IN THE USFWS BIOLOGICAL OPINION.

USFWS will specify avoidance and mitigation measures to minimize impacts to California red-legged frogs and California tiger salamanders in the biological opinion they will draft for the project. PG&E will follow and implement the measures that are outlined in the biological opinion.

APM BIO-19: COMPENSATE FOR PERMANENT IMPACTS ON CALIFORNIA RED-LEGGED FROG AND CALIFORNIA TIGER SALAMANDER UPLAND HABITAT.

It was determined that the project would result in permanent impacts to suitable upland habitat for California red-legged frogs and California tiger salamanders. To compensate for anticipated permanent impacts to suitable upland habitat for California red-legged frogs and California tiger salamanders, PG&E may preserve additional upland habitat within a USFWS-approved conservation area; specific actions will be determined in coordination with USFWS. The ratio of compensation, specific mitigation acreages, and location of the conservation area will be determined through formal consultation with USFWS.

APM BIO-20: CONDUCT TREE TRIMMING, VEGETATION REMOVAL, AND, IF POSSIBLE, TOWER REMOVAL DURING THE NON-BREEDING SEASON.

To avoid removal of active nests, tree trimming, vegetation removal, and removal of towers should be conducted during the non-breeding season (August 16–March 1). If this is not possible, APM BIO-21 will be implemented.

APM BIO-21: CONDUCT PRECONSTRUCTION SURVEYS FOR NESTING MIGRATORY BIRDS AND RAPTORS, AND DEVELOP AN AVIAN PROTECTION PLAN.

Construction activities are anticipated to occur mainly during the nesting season for migratory birds and raptors (generally early February through early August) (Avian Power Line Interaction Committee and USFWS 2005). PG&E will retain a qualified wildlife biologist to conduct preconstruction surveys for nesting birds, for all construction activities that occur within or near suitable breeding habitat. The surveys will be staggered so that they are conducted no more than 1 week prior to the start of construction activities in any one area. Surveys will include the power line route, staging areas, pull sites, and areas of access road improvements where ground disturbance or vegetation clearing is required, at a frequency and timing appropriate for nest detection. If no active nests are detected, no additional mitigation measures are required.

PG&E will develop a project-specific Avian Protection Plan that will outline protection measures for nesting migratory birds and raptors, in the event that nesting migratory birds or raptors are identified in areas where construction activities will occur during preconstruction surveys.

APM BIO-22: AVOID DISTURBANCE OF ACTIVE NESTS BY HELICOPTER USE.

Use of helicopters will be restricted to necessary trips to install and remove towers and poles, install power lines, and deliver and remove equipment to areas lacking vehicle access. Helicopter flight paths will be designed to minimize impacts to nests, and buffers of active nests may be greater than those stated above to avoid helicopter disturbance of active nests identified in preconstruction

surveys of the project sites. If active nests occur under planned helicopter flight paths, especially those near landing areas, coordination with CDFG will be required to determine whether modification of the flight path is necessary to avoid disturbance of active nests.

APM BIO-23: CONDUCT PRECONSTRUCTION SURVEYS FOR ACTIVE BURROWING OWL BURROWS.

CDFG (1995) recommends that preconstruction surveys be conducted in suitable habitat in the project study area (Exhibit 1) and in a 250-foot-wide buffer zone around the construction site to locate active burrowing owl burrows. PG&E will retain a qualified biologist to conduct preconstruction surveys for active burrows according to the CDFG guidelines. The surveys will include a nesting season survey and a wintering season survey, which is the season immediately preceding construction. The surveys will cover all affected areas, including the power line route, staging areas, pull sites, and areas of access road improvements where ground disturbance is required. If no burrowing owls are detected, no further mitigation is required. If active burrowing owl burrows are detected, PG&E will implement APM BIO-24 (Implement CDFG guidelines for burrowing owl mitigation, if necessary).

APM BIO-24: IMPLEMENT CDFG (1995) GUIDELINES FOR BURROWING OWL MITIGATION, IF NECESSARY.

Disturbance of occupied burrows will be avoided to the maximum extent feasible. Disturbance is generally defined as activities occurring within 250 feet of active burrowing owl nesting pairs during the breeding season (February 1 through August 31), or within 160 feet of occupied burrows in the non-breeding season (September 1–January 31).

During the non-breeding season, if direct impacts to an occupied burrow are unavoidable, passive relocation techniques may be considered after all other alternatives have been exhausted. Relocation may involve installing one-way doors at occupied burrow entrances and ensuring that alternative suitable burrows are available. Any relocation effort will be implemented in coordination with CDFG and in accordance with standard burrowing owl guidelines. Any burrowing owl exclusion process will be coordinated by a biologist with prior burrowing owl relocation experience.

PG&E will support site-specific mitigation measures for any burrowing owls with potential to be impacted by construction activities. Measures may include onsite burrow enhancement or artificial burrow installation, in coordination with CDFG. In the event that a site-specific burrowing owl relocation is implemented, PG&E will consult with CDFG regarding suitable replacement of foraging and burrow habitat.

APM BIO-25: IMPLEMENT AVOIDANCE AND MITIGATION MEASURES OUTLINED IN THE USFWS BIOLOGICAL OPINION.

USFWS will specify avoidance and mitigation measures to minimize impacts on San Joaquin kit foxes in the biological opinion they will draft for the project. PG&E will follow and implement the measures outlined in the biological opinion.

Cultural Resources

APM CR-1: AVOID EXISTING CULTURAL RESOURCES.

Although not subjected to formal evaluation, for purposes of this project, cultural resource CR-H-01 is assumed to be a significant resource. Effects to CR-H-01 will be avoided through the development of an ESA protective zone around the site. Prior to construction, a qualified archaeologist will direct this measure to be implemented in a manner that will physically protect the site (e.g., signage and temporary protective fencing). Resource Ca-SBn-143H is an existing paved roadway that will not be affected by the proposed project. Therefore avoidance measures such as an ESA protective zone are not necessary.

APM CR-2: IMPLEMENT CONSTRUCTION MONITORING.

Interior's Standards for professional archaeologists to monitor ground-disturbing activities in areas of high sensitivity for archaeological resources. Monitoring will occur for all activities in areas that have been deemed as highly sensitive for cultural resources (Figures 4.5-1 through 4.5-4) and the area within 100 feet of resource CR-H-01. The monitor will be empowered to temporarily halt construction in the immediate vicinity of a discovery while it is evaluated for significance. With the archaeologist's approval, work may continue on other portions of the site. If the discovery proves to be significant, additional measures will be implemented; these may include avoidance, capping beneath a layer of sterile soil, or data recovery through archaeological excavation (PRC 21083).

APM CR-3: STOP WORK IF PREVIOUSLY UNKNOWN CULTURAL RESOURCES ARE DISCOVERED.

If buried cultural resources such as chipped or ground stone, historic debris, or building foundations are inadvertently discovered during site preparation or construction activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with PG&E and other appropriate agencies. (With the archaeologist's approval, work may continue on other portions of the site.) PG&E will be responsible for ensuring that the archaeologist's recommendations for treatment are implemented.

APM CR-4: STOP WORK IF HUMAN REMAINS ARE DISCOVERED.

If human remains are encountered during site preparation or construction, work will stop within a 100-foot radius of the find and the County Coroner will be notified immediately, as required by state law (California Health and Safety Code 7050.5) and County Ordinance No. B6-18. A qualified archaeologist also will be notified immediately. If the County Coroner determines that the remains are Native American, the coroner will contact the NAHC, pursuant to Section 7050.5[c] of the California Health and Safety Code. There will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie human remains until the County Coroner has determined that (1) no investigation of the cause of death is required; and (2) if the remains are of Native American origin, the descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of with appropriate dignity the human remains and any associated grave goods as provided in PRC 5097.98—unless the NAHC was unable to identify a descendant or the descendant failed to make a recommendation within 48 hours after being notified by the commission.

Geology, Soils, and Seismicity

APM GEO-1: PERFORM SITE-SPECIFIC GEOLOGIC STUDIES AT ACTIVE FAULT CROSSINGS AND MODIFY SITING/DESIGN AS FEASIBLE TO REDUCE DAMAGE

For all pole or tower replacements proposed within a State-designated Earthquake Fault Zone or within 500 feet on either side of a fault considered likely to be active but not zoned by the State, PG&E will perform site-specific geologic investigations with the purpose of locating any active fault trace(s) and ensuring that project facilities are sited and designed to avoid and reduce damage due to surface fault rupture. Studies may include any appropriate combination of literature research, air photo evaluation, reconnaissance field survey, and/or subsurface investigation (fault trenching), based on the professional judgment of licensed supervising personnel (California Professional Geologist or Certified Engineering Geologist). Where significant potential for damage due to surface fault rupture is identified, facilities siting and design will be modified to the extent feasible to avoid or reduce damage.

Hazards and Hazardous Materials

APM HAZ-1: STOP WORK IF HAZARDOUS SUBSTANCES ARE ENCOUNTERED DURING CONSTRUCTION.

If hazardous substances are unexpectedly encountered during trenching, grading, or excavating work, work will be stopped until the material is properly characterized and appropriate measures are taken to protect human health and the environment. If excavation of hazardous materials is required, the materials will be handled, transported, and disposed of in accordance with federal, state, and local regulations.

APM HAZ-2: CONDUCT GROUNDWATER SAMPLING AND TESTING IF SUSPECTED CONTAMINATED GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION.

If suspected contaminated groundwater is encountered in the proposed project construction areas, samples will be collected and submitted for analysis of petroleum hydrocarbons, metals, volatile organic compounds, and semi-volatile organic compounds. If necessary, groundwater will be collected during construction, contained, and disposed of in accordance with all applicable regulations.

APM HAZ-3: DEVELOP AND IMPLEMENT A HELICOPTER LIFT PLAN.

PG&E will require the helicopter vendor to prepare a Helicopter Lift Plan for approval by the FAA prior to any construction helicopter operations. Any specific transportation needs (e.g., temporary road closures) will be identified in the plan and will be coordinated with the appropriate jurisdictions.

APM HAZ-4: DEVELOP AND IMPLEMENT A FIRE RISK MANAGEMENT PLAN.

PG&E follows a standard practice of developing and implementing a Fire Risk Management Plan that addresses fire-suppression equipment and procedures to be used during construction and training of construction and maintenance crews. Additionally, fire suppression equipment and materials will be kept adjacent to all areas of work and in staging areas, and will be clearly marked. Detailed information for responding to fires will be provided in the project's Fire Risk Management Plan. Information contained in the plan and the locations of fire-suppression materials and equipment will be included in the employee environmental training discussed in APM BIO-1.

Hydrology and Water Quality

APM HYDRO-1: PREPARE AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN.

PG&E or its contractor will prepare and implement a SWPPP to prevent construction-related erosion and sediments from entering nearby waterways. The SWPPP will include a list of BMPs to be implemented in areas with potential to drain to tributaries of the Salinas River in Monterey County or to the San Benito River in San Benito County. These BMPs will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMPs to be implemented as part of the project-specific SWPPP may include, but are not limited to, the following control measures:

- Temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, grass buffer strips, high infiltration substrates, grassy swales, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.
- Drainage facilities in downstream offsite areas will be protected from sediment using BMPs consistent with Central Coast Water Board requirements.
- Vegetative cover will be established on the disturbed areas as soon as possible after disturbance.

APM HYDRO-2: DEVELOP AND IMPLEMENT A SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN.

PG&E or its contractor will develop and implement an SPCCP to minimize the potential for, and effects of, spills of hazardous, toxic, or petroleum substances during all construction activities. The SPCCP will be completed and included in the SWPPP before any construction activities begin. PG&E will routinely inspect the construction areas to verify that the control measures specified in the SPCCP are properly implemented and maintained. PG&E will notify its contractors immediately if there is a noncompliance issue and will require compliance.

If an appreciable spill has occurred, a detailed analysis will be performed by a Registered Environmental Assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, PG&E and its contractors will select and implement additional measures to control contamination, with a performance standard that groundwater quality and surface water quality must be returned to baseline conditions.

APM HYDRO-3: PERFORM A DRAINAGE STUDY AND IMPLEMENT A DRAINAGE PLAN.

A drainage study will be performed for any area that crosses a waterway and requires a conveyance structure (culvert) for grading of new construction maintenance roads. The study will include calculations for the potential increases in stormwater runoff from related construction activities. The study also will identify critical drainage paths, and PG&E will implement drainage improvements to minimize the risk of flooding to downstream areas. The drainage plan will require that PG&E or its contractor will be responsible for proper maintenance of the drainages and any BMP associated with each drainage. Implementation of these measures will ensure that altered drainage patterns from project-related construction activities do not significantly affect erosion or sedimentation.

Land Use and Planning

No impacts were identified related to land use and planning.

Mineral Resources

No potentially significant impacts were identified related to mineral resources.

Noise

APM NOI-1: IMPLEMENT NOISE CONTROL MEASURES.

PG&E will implement the following noise abatement measures during project construction to minimize the impact of temporary construction-related noise on nearby residences:

- Notify residents near future construction zones regarding the forecast schedule for nearby construction and provide project contact information.
- Comply with manufacturers' muffler requirements on all construction equipment engines.
- Turn off construction equipment when not in use, where applicable.
- Minimize equipment use.
- Use equipment fitted with factory-installed muffling devices during construction when readily available.
- Route truck traffic away from residential areas where feasible.

APM NOI-2: IMPLEMENT NOISE CONTROL MEASURES FOR HELICOPTER NOISE.

PG&E will implement the following BMPs during project construction to minimize the impact of temporary construction-related noise generated by helicopters:

- Notify residents near future construction zones and along helicopter flight paths regarding the schedule and reasons for upcoming construction and flight operations.
- Provide project contact information to facilitate response to noise complaints during the construction activity.
- To the extent feasible, plan helicopter flight paths between construction zones and the helicopter staging areas to avoid noise-sensitive receivers.
Note: All flight operations including takeoff, landing, and flight paths must comply with FAA regulations and all applicable safety concerns.

Population and Housing

No potentially significant impacts were identified related to population and housing.

Public Services

APM PUB-1: MAINTAIN SECURED FACILITIES DURING CONSTRUCTION ACTIVITIES.

PG&E will implement the following measures during construction activities:

- All equipment will be locked and secured when left unattended at the most secure locations available;
- Contract security will be used at active pull/tension sites, laydown, and storage areas outside work hours;
- All open holes will be covered and secured once activity at that location stops (after hours);
- Anchor bolts on foundations without structures will be capped; and
- Safety structures will be placed at road crossings during overhead wire installation activity to protect traffic and pedestrians.

Recreation

APM REC-1: AVOID DISRUPTION OF RECREATIONAL FACILITIES ALONG THE JUAN BAUTISTA DE ANZA NATIONAL HISTORIC TRAIL DURING PEAK USE.

PG&E will limit construction activities that occur in the immediate vicinity of the Juan Bautista de Anza National Historic Trail to weekdays or as otherwise permitted by the National Park Service. PG&E will ensure that the trail is fully accessible on the weekends, as well as any holidays observed by the National Park Service.

Transportation and Traffic

No potentially significant impacts were identified related to transportation and traffic.

Public Utilities

APM PU-1: CONDUCT A PRE-CONSTRUCTION RECORDS SEARCH/FIELD SURVEY TO IDENTIFY SPECIFIC LOCATIONS OF WATER WELLS AND WELL FIELDS.

To ensure minimal disturbance or alteration of water wells or well fields within the project alignment, PG&E will conduct a pre-construction records search and field survey to identify specific locations of water wells and well fields.

APM PU-2: NOTIFY UNDERGROUND SERVICE ALERT AT LEAST 14 DAYS PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES IN THE UNDERGROUND PORTION OF THE POWER LINE.

PG&E will ensure that Underground Service Alert is notified at least 14 days prior to initiation of construction activities of the underground portion of the power line. Underground Service Alert verifies and physically marks the location of all existing underground utilities in the area of anticipated construction activities to prevent accidental disturbance.

Growth-Inducing and Cumulative Impacts

No potentially significant growth-inducing or cumulative impacts were identified.

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