CALIFORNIA COASTAL COMMISSION

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CDP 9-20-0092/CC-0001-21 (PGE)

March 12, 2021

EXHIBITS

- Exhibit 1 Project location, coastal zone boundary, and wetlands location
- Exhibit 2 Project construction elements and relative location of mapped one and three parameter wetlands
- Exhibit 3 Map of Lyngbye's Sedge Locations
- Exhibit 4 Table 5-1 Mitigation Monitoring, Reporting, and Compliance Program for the PGE Humboldt Bay Humboldt #1 60 KV Project
- Exhibit 5 PGE Humboldt 60 KV Habitat Restoration Plan
- <u>Exhibit 6</u> CCC letter authorizing Palco Marsh excess wetland mitigation acreage for credit towards future project.
- Exhibit 7 Mitigation Proposal from PGE









 Table 5-1

 MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND	Implementing Actions		Implementing Actions		Monitoring/ Reporting Requirements	Timing	
Aesthetics								
Impact 3.1.a: Have a substantial adverse effect on a scenic vista.	APM AE-1: Nighttime lighting to minimize potential visual impacts of construction activity. In the unlikely event that nighttime construction activities are necessary, measures such as use of non- glare or hooded fixtures and directional lighting will be used to reduce spillover into areas outside the construction site and minimize the visibility of lighting from off-site locations wherever feasible.	PG&E and contractors implement measure defined	its to as	CPUC monitor to inspect compliance.	During construction of the project.			
	APM AE-2: Construction Cleanup. Construction debris will be picked up regularly from construction areas. The appearance of disturbed land areas will be restored through implementation of re-contouring and/or re-vegetation.							
	APM AE-4: Design and operation of staging areas to minimize potential visual impacts. Security lighting may be installed at staging areas including helicopter sites. If nighttime security lighting is required in close proximity to sensitive locations such as existing residences, it will be directional and focused to minimize potential spillover or glare with respect to areas outside the staging area, and non-glare or hooded fixtures may be utilized.							
Impact 3.1.c: Substantially degrade the existing visual character or quality of public views of the site and its surroundings, or since the project is in an urbanized area, whether it would conflict with applicable zoning and other regulations governing scenic quality	Implement APMs AE-2 and AE-4 (listed under Impact 3.1.a).	PG&E and contractors implement measure defined	its to as	CPUC monitor to inspect compliance.	During construction of the project.			
Impact 3.1.d: Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area	Implement APMs AE-1, AE-2, and AE-4 (listed under Impact 3.1.a) and APM AE-3 APM AE-3: Use of Galvanized Finish on LDSs, TSPs, and LSTs. Use of a galvanized finish that will weather to a dull, non-reflective patina on new steel poles and lattice towers will reduce potential for a new source of glare resulting from introduction of project elements.	PG&E and contractors implement measure defined	its to as	CPUC monitor to inspect compliance.	During construction of the project.			

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND	Implementing Actions	Monitoring/ Reporting Requirements	Timing
Agriculture and Forestry R	esources		-	
Impact 3.2.e: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non- agricultural use or conversion of forest land to non-forest use	Implement APM AE-2 (listed under Impact 3.1.a).	PG&E and its contractors to implement measure as defined	CPUC mitigation monitor to inspect compliance.	During construction of the project.
Biological Resources		1	1	
Impact 3.4.a: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	APM BIO-1: Development and implementation of a Worker Environmental Awareness Program. A qualified biologist will conduct an environmental awareness program for all on-site construction personnel before they begin work on the project. Training will include a discussion of the avoidance and minimization measures that are being implemented to protect biological resources as well as the terms and conditions of project permits. Training will include information about the federal and state Endangered Species Acts and the consequences of noncompliance with these acts. Under this program, workers shall be informed of the presence, life history, and habitat requirements of all special-status species that may be affected in the project area, and about state and federal laws protecting nesting birds, wetlands, and other water resources. An educational brochure will be produced for construction crews working on the project. Color photos of special-status species will be included, as well as a discussion of relevant APMs and specific avoidance or minimization measures for special-status species and habitats.	PG&E and its contractors to implement measure as defined	CPUC biological monitor to inspect compliance.	Prior to construction and during all phases of construction activities.
	 APM BIO-2: General Resource Protection Measures. This APM consists of the following components: Litter and trash management. All food scraps, wrappers, food containers, cans, bottles, and other trash will be removed from the site daily. Parking. Vehicles and equipment will be parked on pavement, existing roads, developed areas, or approved construction work areas. Route and speed limitations. Vehicles will be confined to established roadways or previously disturbed roadways and pre-approved access roads, overland routes, and construction work areas. Access routes and temporary construction work areas will be limited to the minimum necessary to achieve the project goals. Vehicular speeds will be limited to 15 miles per hour on unpaved roads 	PG&E and its contractors to implement measure as defined	CPUC biological monitor to inspect compliance	Prior to onset of construction and during all phases of construction activities.

	 Maintenance and refueling. All equipment will be maintained to avoid leaks of automotive fluids such as fuels, solvents, or oils. All refueling and maintenance of vehicles and other construction equipment will be restricted to designated staging areas located at least 100 feet from any down-gradient aquatic habitat, unless otherwise isolated from habitat by secondary containment. Proper spill prevention and cleanup equipment will be maintained in all refueling areas. Hazardous materials spills. Emergency spill response and cleanup kits will be readily available for immediate containment and cleanup of an accidental spill. Construction crews will be trained in safe handling of hazardous materials and cleanup responsibilities. Any spills into aquatic habitat will be reported to the CPUC, USACE, State Water Resources Control Board, and the California Coastal Commission (if within the coastal zone) within 24 hours.
Biological Resources	(cont.)
Impact 3.4.a (cont.)	Pets and firearms. No pets, hunting, open fires (such as barbecues), or firearms will be permitted at the project site.
	Reporting and communication. The PG&E project biologist will be responsible for immediately reporting any capture and relocation, or inadvertent harm, entrapment, or death of a federally or state listed species under ESA or CESA, respectively to the USFWS and CDFW, respectively.
	Restore temporarily disturbed habitats. All habitat areas for special- status species that are temporarily disturbed as a result of project activities will be restored upon completion of construction. Disturbed areas will be restored to pre-project conditions in coordination with land owners and in compliance with resource agency permit conditions. Tidal marsh areas will be allowed to passively restore or as otherwise required by resource agency permit requirements.
	Erosion control materials. Only tightly woven netting or similar material will be used for all geo-synthetic erosion control materials such as coir rolls and geo-textiles. No plastic monofilament matting will be used.
	Minimize grading and vegetation removal along access roads and construction work areas, to the extent feasible. PG&E will only trim, clear, or remove vegetation as necessary to establish the access routes and allow equipment use. Trees will be directionally felled away from sensitive biological resource areas, and if that is not possible, removed in sections. Damage to adjacent trees will be avoided to the extent possible.
	Weed management. Vehicles and construction equipment will be cleaned of mud and dirt on site at a PG&E wash facility or otherwise approved wash-down location as needed to minimize transport of weed plant parts or seed. Vehicles will also be cleaned at the completion of the project or when off-road use for that vehicle has been completed.

	APM BIO-3: Conduct Preconstruction Survey(s) for Special-Status Species and Sensitive Biological Resource Areas. A qualified biologist will conduct pre-construction survey(s) in areas identified in the BRTR as having habitat for special-status species and sensitive biological resource areas, either during the appropriate phenological period for plants or within 7 days prior to construction activities for wildlife. If any special-status species is encountered during the pre-construction survey(s), the PG&E project biologist will be contacted immediately. If any special-status species are found nearby but outside the construction work area, they will not be disturbed. If recommended by the biologist, a temporary silt-fence barrier may be installed to prevent special-status species from entering the construction work area(s) during project activities.		PG&E and its contractors to implement measure as defined.		CPUC biological monitor to inspect compliance.	Within 7 days prior to construction and during all phases of construction activities.
Biologic	al Resources (cont.)					
Impact 3.4.a (cont.)	APM BIO-4: Identification and Marking of Sensitive Biological Resource Areas. Sensitive biological resources (e.g., special-status plants, wetlands) in or adjacent to construction work areas identified during the pre-construction surveys, will be clearly marked in the field and on project maps. Such areas will be avoided during construction to the extent practicable.	PG&E and contractors implement measure defined.	its to as	CPUC biologica compliance.	al monitor to inspect	Within 30 days prior to construction.
	APM BIO-5: Biological Monitor On-Site during Construction Activities in Sensitive Biological Resource Areas. A qualified biologist will be onsite during ground-disturbing construction activities in sensitive biological resource areas identified in APM BIO-4 above unless the area has been protected by barrier fencing to protect sensitive biological resources and previously cleared by the qualified biologist. The qualified biologist will ensure implementation and compliance with all avoidance and mitigation measures and have the authority		its to as	CPUC biologica compliance.	al monitor to inspect	During all phases of construction activities.

APM BIO-6: Nesting Bird Impact Avoidance and Protection. If construction work is scheduled during the nesting season (February 1 through August 31), nest detection surveys will correspond with a standard buffer for individual species in accordance with the species-specific buffers set forth in Appendix C of the PEA and will occur within 7 days prior to the start of construction to determine nesting status by a qualified biologist. Nest surveys will be accomplished by ground surveys and will support phased construction, with surveys scheduled to be repeated if construction lapses in a construction work area for 7 days between March and July. Access for ground surveys will be subject to property owner permission.

biological resources.

to stop or redirect work if construction activities are likely to affect sensitive PG&E and contractors implement measure defined.

construction activities within as nesting bird exclusion zones. CPUC biological monitor to inspect compliance.

PG&E biologist to coordinate with

CDFW regarding establishment of

nesting buffers and allowable

Up to 30 days prior

to construction and

during construction.

its

to

If active nests containing eggs or young are found, the biologist will establish a species- specific nest buffer, as defined in Appendix C of the PEA. Where feasible, standard buffers will apply, although the biologist may increase or decrease the standard buffers in accordance with the factors set forth in Appendix C. Nesting pair acclimation to disturbance in areas with regularly occurring human activities will be considered when establishing nest buffers. The established buffers will remain in effect until the young have fledged or the nest is no longer active as confirmed by the biologist. Active nests will be periodically monitored until the biologist has determined that the young have fledged or once construction ends. At the discretion of the biologist, vegetation removal by hand may be allowed within nest buffers or in areas of potential nesting activity. Inactive nests may be removed in accordance with PG&E's approved avian permits. The biologist will have authority to order the cessation of nearby project activities if nesting pairs exhibit signs of disturbance.
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Biological Resources (cont.)

Impact 3.4.a (cont.)	APM BIO-7: Prior to the start of construction and in conjunction with APM-BIO 3, a qualified botanist will resurvey mapped populations of Lyngbye's sedge and flag or otherwise mark (e.g., stake, fence) all special-status plant populations documented adjacent to construction work areas for avoidance as feasible. After project activities have been completed at a given worksite, all staking, fencing, or flagging will be removed.	PG&E and its contractors to implement measure as defined.	CPUC biological monitor to inspect compliance.	Immediately prior to and during construction.
	If complete avoidance of special-status plant populations is not possible, PG&E will implement the following:			
	 PG&E will limit driving across special-status plant populations to the greatest extent feasible. Where direct disturbance to topsoil (except excavation) is unavoidable, matting and other protection measures (e.g., rig mats, timber roads, plating, or tracked vehicles) will be used to minimize soil compaction or destruction of underground plant structures. Matting and other protection measures will be approved by a qualified biologist before work begins at that location. 			
	 For any unavoidable excavation required within Lyngbye's sedge populations, the upper 6 inches of topsoil containing the plant's rhizomes will be stockpiled. PG&E will use the stockpiled topsoil to restore the area after temporary construction has been completed. 			
	APM BIO-8: Special-Status Amphibian and Reptile Impact Avoidance and Protection. During wet weather or the rainy season, all open holes, pits, and trenches will be protected to ensure that frogs, salamanders, and/or turtles do not become entrapped. Protective fencing, coverings, or ramps will be installed to either prevent wildlife from falling into excavations or to allow for escape. At the end of each work day, steep-walled holes or trenches more than six inches deep will be covered or provided with one or more escape ramps and/or fenced. Open excavations will be inspected each morning, prior to the start of construction activities, to ensure that no wildlife are trapped. Construction personnel will also check underneath vehicles and within materials to be moved (i.e., tires, tracks, pipes, etc.) for the presence of frogs, salamanders, and/or turtles when parked or placed near suitable aquatic or upland dispersal habitat. Any species found will be captured and relocated to an approved location as approved by the resource agencies, if required, and in compliance with any regulatory permits issued for the project	PG&E and its contractors to implement measure as defined.	CPUC biological Monitor to inspect compliance.	During construction.

 APM BIO-9: Implement General Protection Measures for Wetlands and Other Waters. PG&E will implement the following general measures to minimize or avoid impacts on wetlands and other waters: Avoid wetlands and other waters to the extent feasible. Construction activities in wetlands will generally occur during the dry season (May 1 to October 15) to the extent feasible. 	PG&E and its contractors to implement measure as defined.	CPUC biological monitor to inspect compliance.	Prior to and during ground disturbing construction activities.
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Biological Resources (cont.)

Impact 3.4.a (cont.)	•	Ground-based construction activities in tidally influenced wetlands near Buhne Slough will not occur during extreme high tide events that would flood the construction work areas. Where travel across seasonal wetlands is necessary, it will occur during dry conditions, when feasible, to avoid soil compaction or mixing. If travel is required during wet or moist conditions, temporary matting or other protection measure (e.g., rig mats, timber roads, plating, or tracked vehicles [preferably rubber tracked]) will be used to avoid soil compaction or mixing. Matting and other protection measures will be approved by a qualified biologist before construction work at that location begins. Conduct all fueling of vehicles at least 100 feet from wetlands and other water bodies unless approved by a qualified biologist. Set construction work areas back at least 50 feet from streams, creeks, or other water bodies unless approved by a qualified biologist. Implement a Storm Water Pollution Prevention Plan (SWPPP) to minimize construction- related erosion and sediments from entering nearby waterways (see APM WQ-1).			
	MI ea bic ide spa col me	M BIO-1: Pre-construction Bat Survey. A pre-construction survey for special-status bat (i.e., Townsend's big- red bat [Corynorhinus townsendii] and pallid bat [Antrozous pallidus]) habitat shall be conducted by a qualified logist (i.e., who is experienced in the identification of special-status bat habitat) in advance of any tree removal, to intify signs of potential bat habitat and use (e.g., basal hollows in large trees or snags, large cavities or crevices, aces under loose/exfoliating tree bark, or deep bark fissures). Bat maternity colonies will be avoided during instruction. Should potential roosting habitat, or active bat roosts be found in trees to be removed, the following easures shall be implemented	PG&E and its contractors to implement measure as defined.	CPUC biological monitor to inspect compliance.	Prior to final design and construction.
	•	Tree removal shall occur outside of months of maternity roosting (approximately April 15 to August 15) and winter torpor (approximately October 31 to March 31), to the extent feasible.			
	•	Trees with maternity roosts shall be avoided during the roosting period (April 15 to August 15). If pre-construction surveys identify suitable bat roosting habitat in a tree planned for removal, a qualified biologist shall be present during tree removal. Trees shall be disturbed only when no rain is occurring or is not forecast to occur for three days and when daytime temperatures are at least 50 degrees Fahrenheit (°F).			
	•	Trimming and removal of trees containing or suspected to contain roost sites shall be done under supervision of a qualified biologist and implemented over two days. On day one, branches and limbs not containing cavities or fissures in which bats could roost shall be cut using chainsaws. The following day, the remainder of the tree, including branches or limbs containing roost sites shall be removed under the supervision of the biologist, also using chainsaws.			

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND	Implementing Actions	Monitoring/ Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 3.4.b: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	 Implement APMs BIO-1 through BIO-5 (listed under Impact 3.4.a). MM BIO-2: Habitat Restoration Plan. A qualified ecologist shall prepare and implement a restoration plan with detailed specifications for restoring all temporarily disturbed sensitive natural communities. The plan shall provide for the following: Pre-construction surveys by a qualified biologist of representative impact areas to characterize vegetation present. Use of locally native, ecologically suitable species for revegetation. Sanitation measures (e.g., locally sourced cuttings, elimination of container stock, or exclusive use of container plants grown according to plant pathogen best management practices) to prevent the introduction and/or spread of sudden oak death, other plant pathogens, and invasive plants during revegetation. Monitoring by a qualified biologist up to a period of five years unless performance standards are met earlier, or as specified by state and federal permitting agencies. Include minimum performance criteria for combined native and naturalized plant cover (50 percent, or equal to or greater than 	PG&E and its contractors to implement measure as defined.	CPUC biological monitor to inspect compliance.	As part of final design and prior to construction. At the conclusion of construction.
	baseline within the monitoring period, or as specified by state and federal permitting agencies); and for maximum invasive plant cover (to return the project back to baseline conditions, or as specified by state and federal permitting agencies).			
Impact 3.4.c: Have a substantial adverse effect on state or federally	Implement APMs BIO-1 through BIO-5, BIO-9, WQ-1, WQ-2, HAZ-1, and HAZ-2	PG&E and its	CPUC biological monitor to inspect	As part of final design and prior to
protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	APM BIO-10: Restore Temporarily Impacted Wetlands and Other Waters. All wetlands and other waters that are temporarily disturbed as a result of project activities will be restored following completion of construction in accordance with any applicable resource agency permits.	contractors to implement measure as defined.	compliance.	construction. At the conclusion of construction.
	APM BIO-11: Compensate for Permanent Impacts on Wetlands and Other Waters in Accordance with Project Permits. PG&E will compensate for permanent impacts on wetlands by providing at least 1:1 mitigation for any unavoidable permanent impacts to wetlands and waters within the coastal zone and in compliance with resource agency			To be completed as part of permitting.

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND	Implementing Actions	Monitoring/ Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 3.4.c (cont.)	permit requirements. Final compensation ratios for impacts to wetlands and waters throughout the project alignment will be based on site-specific information and finalized through discussions with the U.S. Army Corps of Engineers and the North Coast Regional Water Quality Control Board as part of the permitting processes for the project.			
Cultural Resources			-	
Impact 3.5.b: Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5.	APM CUL-1: Workers Environmental Awareness Training. PG&E will provide environmental awareness training on archaeological resources protection. This training may be administered by the principal cultural resource specialist (CRS) as a stand-alone training or included as part of the overall environmental awareness training as required by the project and will at minimum include: types of cultural resources or fossils that could occur at the project site; types of soils or lithologies in which the cultural resources could be preserved; procedures that should be followed in the event of a cultural resource or human remain discovery; and penalties for disturbing cultural resources.	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to any ground- disturbance.
	APM CUL-2: Flag and Avoid Resources (Spiegelberg Homestead Archaeological Deposit). The archaeological deposit at the Spiegelberg Homestead is not in the PAL, but adjacent to it. There are no roadway or land improvements proposed in this location as use of this area is limited to access to a landing zone. Additionally, no pole replacements or installations are proposed at this location. However, to ensure no inadvertent impacts occur to this resource, a qualified archaeologist will establish exclusion flagging or safety fencing around the archaeological site.			
	Mitigation Measure CUL-1: This measure supersedes APM CUL-3(a) and CUL-4. If indigenous or historic-era archaeological resources are encountered during proposed Project development or operation, PG&E and/or its contractors shall immediately cease all construction activity within 100 feet of the find and flag off the area for avoidance. The CPUC and a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology and with expertise in California archaeology, shall be immediately informed of the discovery. The qualified archaeologist shall inspect the discovery and notify the CPUC of their initial assessment. Indigenous archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include building or structure footings and walls, and deposits of metal, glass, and/or ceramic refuse. If the qualified archaeologist determines that the resource is or is potentially indigenous in origin, culturally affiliated California Native American Tribes shall be contacted to assess the find and determine whether it is potentially a tribal cultural resource	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to and during construction involving ground- disturbance.

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND	Implementing Actions	Monitoring/ Reporting Requirements	Timing
Cultural Resour	ces (cont.)			
Impact 3.5.b (cont.)	If the CPUC determines, based on formal evaluations of California Register-eligibility (at Public Resources Code Section 5024.1[c]) documented by the qualified archaeologist and the culturally affiliated California Native American Tribes (if the resource is indigenous), that the resource is either an historical resource or unique archaeological resource (as defined in CEQA Guidelines Section 15064.5 and Public Resources Code Section 21083.2), or that the resource may qualify as a tribal cultural resource (as defined in Public Resources Code Section 21074), then the resource shall be avoided if feasible. Avoidance means that no activities associated with the proposed Project that may impact cultural resources shall occur within the boundaries of the resource or any defined buffer zones. The CPUC shall determine whether avoidance is feasible considering factors such as the nature of the find, project design, costs, and other considerations. Formal significance evaluations under California Register Criterion 4 shall be guided by research designs developed by a qualified archaeologist .			
	culturally affiliated California Native American Tribes (if the resource is indigenous), and other appropriate interested parties to determine treatment measures to minimize or mitigate any potential impacts to the resource pursuant to Public Resources Code Section 21083.2 and CEQA Guidelines Section 15126.4.			
	If avoidance is not feasible, the CPUC shall prepare and implement an Archaeological (and/or Tribal Cultural) Resources Treatment Plan that outlines the treatment measures for the resource based on the resource's values/significance as detailed in the formal California Register-eligibility evaluation.			
	Any treatment measures implemented shall be documented in a professional-level technical report (e.g., Archaeological Testing Results Report, Archaeological Data Recovery Report, Ethnographic Report, etc.), to be authored by a qualified archaeologist and filed with CHRIS. Construction work at the location of the find may commence upon completion of the approved treatment and authorization by the CPUC. Work may proceed in other parts of the C-APE while the mitigation is being carried out.			
	If the CPUC determines during project implementation that portions of the C-APE may be sensitive for archaeological resources or tribal cultural resources, the CPUC may authorize construction monitoring of these locations by a qualified archaeologist and Native American monitor. Any monitoring by a Native American monitor shall be done under agreements between PG&E or their designated contractor and culturally affiliated California Native American Tribes.			

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND	Implementing Actions	Monitoring/ Reporting Requirements	Timing
Geology, Soils, and Pale	ontological Resources			
Impact 3.5.c: Disturb any human remains,	Implement APM CUL-1	PG&E and its contractors to	CPUC mitigation monitor to inspect	Prior to and during construction
outside of formal	APM CUL-3: Manage Unanticipated Cultural Resources Discoveries.	implement measure as defined.	compliance.	disturbance.
cemeteries.	a) Cultural Resources			
	If cultural resources 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 PG&E CRS/archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with PG&E and other appropriate agencies. Work may continue on other portions of the site with the CRS/archaeologist's approval. PG&E will implement the CRS/archaeologist's recommendations for treatment of discovered cultural resources.			
	b) Human Remains			
	In keeping with the provisions provided in 7050.5 CHSC and Public Resource Code 5097.98, in the unlikely event that human remains or suspected human remains are encountered during any project-related activity, PG&E will:			
	Stop all work within 100 feet;			
	• Immediately contact the CRS, who will then notify the county coroner and the CPUC;			
	 Secure the location, but do not touch or remove remains and associated artifacts; 			
	Do not remove associated spoils or pick through them;			
	Record the location and keep notes of all calls and events; and			
	• Treat the find as confidential and do not publicly disclose the location.			
	If the coroner determines that the remains are Native American, California Health and Safety Code7050.5 and PRC Section 5097.98 require that the PG&E CRS contact the NAHC within 24 hours. The NAHC, as required by PRC Section 5097.98, will determine and notify the Most Likely Descendant.			

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND	Implementing Actions	Monitoring/ Reporting Requirements	Timing
Geology, Soils, and Paleontologica	I Resources (cont.)			
Impact 3.7.a.iii: Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving seismic- related ground failure, including liquefaction.	APM GEO-1: Minimization of Construction in Soft or Loose Soils. Where soft or loose soils are encountered during project construction, appropriate measures will be implemented to avoid, accommodate, replace, or improve such soils. Depending on site-specific conditions and permit requirements, these measures may include excavating soft or loose soils and replacing them with engineered backfill materials, or installing matting in temporary work areas.	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to construction activities.
	APM GEO-2: Reduction of Slope Instability during Construction. Existing natural or temporarily constructed slopes affected by construction or operations will be evaluated for stability. Grading plans will be designed to limit the potential for slope instability and minimize the potential for erosion.			
Impact 3.7 a.iv: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.	Implement APM GEO-2 (listed under Impact 3.7.a.iii)	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to construction activities.
Impact 3.7.b: Result in substantial soil erosion or the loss of topsoil.	Implement APM WQ-1	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to and during construction.
Impact 3.7.c: Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse	Implement APM GEO-1 and GEO-2 (listed under Impact 3.7.a.iii)	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to construction activities.
Impact 3.7.f: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	 APM PALEO-1: Unanticipated Potential Paleontological Resource. If significant paleontological resources are discovered during construction activities, the following procedures will be followed: Stop work immediately within 100 feet. 	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	During construction activities involving ground disturbance.
	Contact the designated project inspector and PG&E CRS immediately;			

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND	Implementing Actions	Monitoring/ Reporting Requirements	Timing
Geology, Soils, and Paleonto	ological Resources (cont.)	_		
Geology, Soils, and Paleonto Impact 3.7.f (cont.)	 Protect the site from further impacts, including looting, erosion or other human or natural damage; The PG&E CRS in tandem with CPUC will arrange for a qualified paleontologist to evaluate the discovery. The paleontologist will be responsible for developing the recovery strategy in tandem with PG&E and will lead the recovery effort, which will include establishing recovery standards, preparing specimens for identification and preservation, documentation and reporting, and securing a curation agreement from the approved agency; and, Work may not resume within 100 feet of the find until approval by the paleontologist and PG&E CRS. APM PALEO-2: Worker's Environmental Awareness Training. Moderate and potentially high sensitivity formations are identified within the PAL; therefore, PG&E will provide environmental awareness training on paleontological resources protection. This training may be administered as a stand- alone training or included as part of the overall environmental awareness training will include, at minimum, the following: The types of fossils that could occur at the project site. The types of lithologies in which the fossils could be preserved. 	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Training shall take place prior to and during construction for new staff.
	 The procedures that should be taken in the event of a fossil discovery. Penalties for disturbing paleontological resources. 			

Hazards and Hazardous Materials (cont.		
Impact 3.8.a (cont.)	 Minimize construction equipment exhaust by using low-emission or electric construction equipment where feasible. Portable dieselfueled construction equipment with engines of 50 horsepower or larger and manufactured in 2000 or later will be registered under the CARB Statewide Portable Equipment Registration Program. Minimize welding and cutting by using compression of mechanical applications where practical and within standards. 	

	Encourage the recycling of construction waste where feasible			
Impact 3.9.a: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	 APM HAZ-1: Hazardous-Substance Control and Emergency Response. PG&E will implement its hazardous substance control and emergency response procedures to ensure the safety of the public and site workers during construction. The procedures identify methods and techniques to minimize the exposure of the public and site workers to potentially hazardous materials during all phases of project construction through operation. They address worker training appropriate to the site worker's role in hazardous substance control and emergency response. The procedures also require implementing appropriate control methods and approved containment and spill-control practices for construction and materials stored on site. If necessary to store chemicals on site, they will be managed in accordance with all applicable regulations. Material safety data sheets will be maintained and kept available. No known soil contamination was identified within the project site. In the event that soils suspected of being contaminated (on the basis of visual, olfactory, or other evidence) are unearthed during site grading or excavation activities, the excavated soil will be tested, and if contaminated above hazardous waste levels, 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. All hazardous materials and hazardous materials. The hazardous substance control and emergency response procedures include, but are not limited to, the following: Proper disposal of potentially contaminated soils. 	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to and during construction.
				4

	 Establishing site-specific buffers for construction vehicles and equipment located near sensitive resources. Emergency response and reporting procedures to address hazardous material spills. 					-
Impact 3.9.e: Be located within an airport land use plan or, where such a plan has no been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excession noise for people residingor working in the project area	 APM TT-2: Air Traffic Control. PG&E will implement the following protocols related to helicopter use: PG&E will comply with all applicable FAA regulations regarding air traffic; PG&E will prepare a Helicopter Use Plan; Helicopter operators will coordinate all project helicopter operations with local airports before and during project construction; and PG&E will comply with FAA requirements for helicopter activities in residential areas that will reduce safety risks, an if necessary coordinate with residents that may needto temporarily evacuate their properties. 	PG&E and its contractors to implement measure as defined.	CPUC mitigati	on monitorto inspect co	mpliance.	Prior to and during construction.
Environmental Impact	Applicant Proposed Measures (APMs) and Mitiga Measures (MMs) Identified in the IS/MND	ation	Implementin g Actions	Monitoring/ Reporting Requirements	Timing	-
Hydrology and Water Quality						
Impact 3.10.a: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Implement APM HAZ-1 (see Impact 3.9.a) and APM 3.4.a), listed under Hazards and Hazardous Materia Resources, respectively. APM WQ-1: Development and Implementation of approval, PG&E will prepare and implement a SWPPF impacts on surface water and groundwater quality. The specifically for the hydrologic setting of the proposed p topography, etc.). The SWPPP will include procedures graded areas, reduce erosion, avoid release of hazard to surface waters, and manage dewatering effluents. T BMPs and erosion and sediment control measures, su bars, covers, silt fences, storm drain inlet protection, m sepsitive area access restrictions (e.g., flagging) that w	BIO-2 (see Impact Is and Biological a SWPPP. Following project P to minimize construction e SWPPP will be designed roject (e.g., surface and standards to stabilize ous materials and sediment he SWPPP will identify ch as straw wattles, water nud trackout controls, and will be installed before the	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to construction.	
	onset of winter rains or anticipated storm events to mi water and groundwater.	nimize impacts on surface				_

Impact 3.10.b: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Impl	ement APM WQ-1 (listed under Impact 3.10.a)		PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	t	Prior to construction.
Impact 3.10.c.i: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site.	Impl	ement APM WQ-1 (listed under Impact 3.10.a)		PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	t	Prior to construction.
Environmental Impact		Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND	Implementing Actions	Monit Repor Requi	oring/ ting rements	Tin	ning
Hydrology and Water Quality (cont.)							
Impact 3.10.c.iii:		Implement APM WQ-1 (listed under Impact 3.10.a)	PG&E and its	CPUC	mitigation monitor	Prie	or to
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff		Implement APM WQ-1 (listed under impact 3. io.a)	contractors to implement m as defined.	easure to insp	pect compliance.	cor	istruction.

Noise and Vibra	ation							
Impact 3.13.a: Generate a subst permanent increa in the vicinity of t standards establi plan or noise ord standards of othe	tantial temporary or ase in ambient noise levels he project in excess of shed in the local general inance or applicable er agencies	APM NOI-3: Notify Sensitive Receptors of Helicopter Use. Sensitive receptors within 300 feet of areas where helicopters will be used for construction will be notified by mail, personal visit, door hanger, or email at least 7 days prior to beginning helicopter activities. Notification will include posting signs in appropriate locations with a contact number to call with questions and concerns	PG&E and contractors implement as defined	its to measure	CPUC m monitor t compliar	itigation to inspect nce.	At least days pric helicopte activities	7 or to er 3.
Mitigation Measure NOI-1a: Adherence to City of Eureka Construction Hour Restrictions. Construction activities within the City of Eureka shall be restricted to the daytime hours between 7:00 a.m. and 7:00 p.m., except as allowed pursuant to Mitigation Measure NOI-1b.PG&E and its contractors implement as defined.CPUC monito compliance		CPUC mitigation monitor to inspect compliance.		Prior to construction.				
Environmental Impact	Applicant Proposed Measu IS/MND	ures (APMs) and Mitigation Measures (MMs) Identified in the		Implemen Actions	nting	Monitoring/ Reporting Requirements		Timing
Noise and Vibra	tion (cont.)							
Impact 3.13.a (cont.)	 Mitigation Measure NOI-1b outside the hours specified i and/or its contractors shall ir Plan construction activit When nighttime constru portable construction no curtains adjacent to or a a solid panel and a wea noise shield. Offer temporary relocati would occur after 10:00 The notification requiren planned nighttime const construction site(s) shall mail and informed of the 	b: Nighttime Construction. In the event construction would be require n Mitigation Measure NOI-1a and within 500 feet of sensitive receptors mplement the following measures to reduce any potential nighttime noi ies to minimize the amount of nighttime construction. ction activities take place within 200 feet of noise sensitive receptors, u bise barriers, such as paneled noise shields, barriers, enclosures, or so iround loud stationary equipment. Noise control shields shall be made ther-protected, sound-absorptive material on the construction-activities that p.m. nents in APM NOI-2 shall be extended to include residences within 500 ruction activities. All residents within 500 feet of the proposed nighttime be notified at least 7 days in advance by mail, personal visit, door har e expected work schedule.	ed to occur s, PG&E ise impacts. use ound featuring side of the 0 feet of e nger, or e-	PG&E a contractor implement measure defined.	and its s to as	CPUC mitigatic monitor to inspi compliance.	n əct	Prior to constru ction.

Mitigation Measure NOI-fc: Construction Noise Management Plan, PG&E and/or its contractors shall implement the measures identified below to ensure that construction noise levels are reduced to 90 dBA Leg or implement the measure identified below to ensure that construction equipment engines and ensure exhaust multifiers are in good condition; PG&E and its construction equipment is on all construction equipment engines and ensure exhaust multifiers are in good condition; PG&E and its construction equipment when not in use, where applicable; Declate stationary equipment, construction staging areas, helicopter landing zones, and construction material areas as far as practical from sensitive receptors; Include noise control requirements for construction equipment and tools in specifications provided to construction contractors to the maximum extent practicable, including performing all work in a manner that minimizen loss using equipment with effective multifiers; underlaw, the noise stativities to all sensitive receptors and residences within 500 feet of construction sites, staging PG&E shall provide notice by mail teast 1 week prior to construction activities to all sensitive receptors and residences within 500 feet of construction work areas. The announcement shall state approximately where and when construction or will occur in the areas, for areas that would be exposed to helicopter anchines. The announcement shall state approximately where and when construction will cocur in the areas. The anagement with encode develop proceedures for exponding construction to respond to concerns of neighboring receptors, including periode a public lision before and during construction to respond to concerns of neighboring receptors, including construction and evelop proceedures for responding to calles. Proceedures for responding to calles. Proceedures for exponding to calles prove approximate dealers in the cohelide of							
 Comply with manufacturer's muffler requirements on all construction equipment engines and ensure exhaust mufflers are in good condition; Turn off construction equipment when not in use, where applicable; Locate stationary equipment, construction staging areas, helicopter landing zones, and construction material areas as far as practical from sensitive receptors; Include noise control requirements for construction equipment and tools in specifications provided to construction contractors to the maximum exteri practicable, including performing all work in a manner that minimizes noise, using equipment with effective mufflers; undertaking the noise activities during times of least disturbance to surrounding receited at a vision excupants; and selecting naul routes that avoid residences within 500 feet of construction sites, staging PG&E shall provide notice by mail at least 1 week prior to construction activities to all sensitive receptors and residences within 500 feet of construction sites, staging Vards, and access roads, and within 1,000 feet of helicopter landing zones and flight paths. PG&E shall also post notices in public areas, including recreational use areas; Noise and Vibration (cont.) Impact 3.13.a will occur in the area. For areas that would be exposed to helicopter noise, the announcement shall state approximate details on the schedule of the planed construction of helicopter activities. Notices shall provide approximate details on the schedule of the dates, times, and duration of helicopter activities. Notices shall provide inspond to construction steple(s). PG&E shall all construction to explaine ad during construction to responding to califs. Proceedures for reaching the planed construction or helicopter activities. Notices and align so estations and darea goorsed conspond to construction steple(s). PG&E shall all provide approximate details and here soft anotices and alignes and align provide approximate det		Mit imp les:	igation Measure NOI-1c: Construction Noise Management Plan. PG&E and/or its contractors shall lement the measures identified below to ensure that construction noise levels are reduced to 90 dBA Leq or s at sensitive receptors located within 100 feet.	PG&E and contractors implement	its to	CPUC mitigation monitor to inspect compliance.	Prior t constr ction.
 Turn off construction equipment when not in use, where applicable; Locate stationary equipment, construction staging areas, helicopter landing zones, and construction meterial areas as far as practical from sensitive receptors; Include noise control requirements for construction equipment and tools in specifications provided to construction constructors to the maximum extent practicable, including performing all work in a manner that minimizes noise; using equipment with effective multiflers; undertaking the noises tactivities during times of least disturbance to surrounding residents and occupants; and selecting haul routes that avoid residential areas; PG&E shall provide notice by mail at least 1 week prior to construction activities to all sensitive receptors and residences within 500 feet of construction sites, staging yards, and access roads, and within 1,000 feet of helicopter landing zones and flight paths. PG&E shall also post notices in public areas, including recreational use areas, Noise and Vibration (cont.) impact 3.13.a within 500 feet of the Project alignment and construction work areas. The announcement shall provide approximate details on the schedule of the dates, times, and duration of helicopter rolise, hall provide in reducing noise intrusion, for example, by dosing windows facing the planned construction. PG&E shall identify and provide a public insiso before and during construction to respond to concerns of neighbroing receptors; including residents, abut construction and develop procedures for responding to callers. Proceedures for resching where each when econstruction and evelop provide and also posted conspicuously at the construction shells operative in person shall be included in the above notices and also posted conspicuously at the construction neighbroing receptors; including residents, abut constructes for responding to callers. Proceedures for resching the public liaison offi		•	Comply with manufacturer's muffler requirements on all construction equipment engines and ensure exhaust mufflers are in good condition;	measure defined.	as		
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 When construction activities take place within 100 feet of noise sensitive areas, use portable construction noise barriers such as paneled noise shields, barriers, or enclosures, or sound curtains adjacent to or around loud stationary equipment. Noise control shields shall be made featuring a solid panel and a weather-protected, sound- absorptive material on the construction-activity side of the noise shield. Noise control shields with a minimum performance rating of STC-25 and Noise Reduction Coefficient (NRC) of 0.75 are capable of attenuating noise levels by up to 15 dBA. Route all construction traffic via designated truck routes where possible and prohibit construction related heavy truck traffic in residential areas where feasible. 	Impact 3.13.a (cont.)	•	within 500 feet of the Project alignment and construction work areas. The announcement shall state will occur in the area. For areas that would be exposed to helicopter noise, the announcement shall of the dates, times, and duration of helicopter activities. Notices shall provide tips on reducing noise facing the planned construction. PG&E shall identify and provide a public liaison before and during neighboring receptors, including residents, about construction noise disturbance. PG&E shall also e	e approximately provide approxi intrusion, for ex construction to r establish a toll-fre	where mate ampl espor	and when construction details on the schedule e, by closing windows nd to concerns of ephone number for constant the numbia	
Route all construction traffic via designated truck routes where possible and prohibit construction related heavy truck traffic in residential areas where feasible.			receiving questions or complaints during construction and develop procedures for responding to cal liaison officer via telephone or in person shall be included in the above notices and also posted con shall address all complaints within 1 week of when the complaint is filed. PG&E shall provide month responses to the CPUC. These reports shall be provided to the CPUC within 15 days of the end of	llers. Procedures spicuously at the lly reports with re the month.	e for r con: cord	struction site(s). PG&E s of complaints and	
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		•	receiving questions or complaints during construction and develop procedures for responding to cal liaison officer via telephone or in person shall be included in the above notices and also posted con shall address all complaints within 1 week of when the complaint is filed. PG&E shall provide month responses to the CPUC. These reports shall be provided to the CPUC within 15 days of the end of the When construction activities take place within 100 feet of noise sensitive areas, use portable constru- shields, barriers, or enclosures, or sound curtains adjacent to or around loud stationary equipment. It solid panel and a weather-protected, sound- absorptive material on the construction-activity side of the minimum performance rating of STC-25 and Noise Reduction Coefficient (NRC) of 0.75 are capable Route all construction traffic via designated truck routes where possible and prohibit construction rel- where feasible.	Ilers. Procedures spicuously at the ily reports with re the month. Inction noise barr Noise control shi he noise shield. of attenuating n ated heavy truck	e for r e cons ecord ers s elds s Noise oise l	struction site(s). PG&E s of complaints and uch as paneled noise shall be made featuring a e control shields with a evels by up to 15 dBA. Ic in residential areas	

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND	Implementing Actions	Monitoring/ Reporting Requirements	Timing
Recreation			-	
Impact 3.16.a: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	APM REC-1: Coordination and Signage. PG&E will coordinate with the operators of the Redwood Fields Ballpark, Redwood Acres Fairgrounds, and McKay Community Forest during project construction activities to minimize any potential construction impacts from the project. Signage notifying of construction activities will be posted at these recreational facilities at least one week in advance of construction.	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Signage to be posted at least one week prior to construction.
Transportation				
Impact 3.17.a: Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.	APM TT-1: Temporary Traffic Controls. PG&E will obtain necessary transportation and encroachment permits from Caltrans and the local jurisdictions, as required, including those related to State Route crossings and the transport of oversized loads and certain materials, and will comply with permit requirements designed to prevent excessive congestion or traffic hazards during construction. PG&E will develop road and lane closures or width reduction or traffic diversion plans as required by the encroachment permits. Construction activities that are in, along, or cross local roadways will follow best management practices and local jurisdictional encroachment permit requirements, which may include traffic controls such as signs, cones, and flaggers to minimize impacts on traffic and transportation in the Project area. PG&E will coordinate with ETS regarding the schedule and scope of construction activities that could interfere with bus routes crossed by the Project alignment and will coordinate temporary relocation of bus stops if necessary.	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to applicable phases of construction involving traffic control.
Impact 3.17.c: Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	Implement APM TT-1 (see Impact 3.17.a)	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to applicable phases of construction involving traffic control.

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND	Implementing Actions	Monitoring/ Reporting Requirements	Timing
Transportation (cont.)				
Impact 3.17.d: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses	Implement APM TT-1 (see Impact 3.17.a)	PG&E and its contractors to implement	CPUC mitigation monitor to inspect compliance.	Prior to applicable phases of construction involving traffic control.
(e.g., fann equipment).	APM TT-3: Coordination Road Closures with Emergency Service Providers and School Districts. At least 24 hours prior to implementing any road or lane closure, PG&E will coordinate with applicable emergency service providers and school districts in the Project vicinity. PG&E will provide information regarding the road or lanes to be closed, the anticipated date, time, and duration of closures, and a contact telephone number.	defined.		Construction. At least 24 hours prior to implementing any road or lane closures.
Tribal Cultural Resources				
Impact 3.18.a.i: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).	Implement APM CUL-1and Mitigation Measure CUL-1 (see Impact 3.5.b and 3.5.c)	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to and during construction involving ground- disturbance.
Impact 3.18.a.ii: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Implement APM CUL-1and Mitigation Measure CUL-1 (see Impact 3.5.b and 3.5.c)	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to and during construction involving ground- disturbance.
Utilities and Service Systems	-		1	
Impact 3.19.a: Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	Implement APM GEO-2 (see Impact 3.7.a.iii) and APM WQ-1 (see Impact 3.10.a) which can be found under Geology and Soils, and Hydrology and Water Quality, respectively.	PG&E and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	Prior to and during construction.

OCTOBER 21, 2020 Habitat Restoration Plan for the PG&E Humboldt Bay-Humboldt #160 kV Reconductoring Project



PREPARED

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FOR

P R E P A R E D B Y

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Cover photo: a wetland habitat within the Humboldt #1 60 kV transmission line corridor, July 31,2018.

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Appendices

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1 INTRODUCTION

This Habitat Restoration Plan (Plan) provides the specifications for restoring sensitive habitats, including one- and threeparameter wetlands under the jurisdiction of the California Coastal Commission (CCC) and the U.S. Army Corps of Engineers (Corps)/Regional Water Quality Control Board (Water Board), respectively, as well as sensitive natural communities, that may betemporarily disturbed from implementation of Pacific Gas and Electric Company's (PG&E's) Humboldt Bay-Humboldt #1 60 kilovolt (kV) Reconductoring Project (Project). Preparation and execution of this Plan also satisfies Mitigation Measure BIO-2 (MM BIO-2) developed by the California Public Utility Commission (CPUC) in the Project's Final Initial Study/Mitigated Negative Declaration (IS/MND) (CPUC 2020) and provides support for resource agency permitting with the Corps, the Water Board, and the CCC. The Project will maintain transmissionsystem reliability in unincorporated Humboldt County and the City of Eureka.

The objective of this Plan is to allow for passive restoration of impacted sensitive habitats. To ensure impacts are mitigated, the Plan details surveys to characterize pre-construction vegetationconditions, a monitoring program with performance goals to ensure the impacted sensitive habitats are being restored to a similar quality as documented pre-construction, and potential remedial actions, should they become necessary.

2 PRE-CONSTRUCTION RESTORATION ACTIVITIES

To establish the baseline conditions of sensitive habitats in work areas and inform performance standards, prior to commencement of Project construction plots will be established in adjacent areas that will not be impacted from construction, pre-construction surveys will be performed, and photo monitoring points will be established for each sensitive habitat. Impacted habitats willbe mapped with submeter GPS during construction activities, and a final impact map will be developed at the end of major construction. This as-built map will determine the final locations requiring restoration. These activities are described in the following sections.

2.1 Establish Adjacent Plots

For each sensitive habitat within work areas, three plots will be established in adjacent areas that will not be impacted from construction and recorded using a sub-meter accuracy GPS unit (e.g., Trimble Geo 7x). Plot size may vary among herbaceous, shrub, and tree-dominated communities. Plots will be located within the existing PG&E right-of-way or immediate vicinity, to ensure bothease of access and that similar site conditions are present. Data collected will include total (absolute) canopy cover, absolute cover of all dominant and associate plant species, and percent cover of non-native plant species (see Appendix A: Sample Vegetation Data Form). Invasive plant species are those species with a California Invasive Plant Council (Cal-IPC) rating of Moderate or High (Cal-IPC 2020 or most current version). Adjacent plot data will be collected annually to document conditions in surrounding stands and help quantify any non-Project related impacts (e.g., drought) that may affect whether areas meet performance standards (Section 3.1).

2.2 Pre-construction Surveys

Prior to implementation of the Project, precise boundaries of all sensitive habitats within workareas will be recorded by qualified biologists. Biologists also will document pre-existing

vegetation conditions within either the entirety of each occurrence of a given sensitive habitat (if occurrences are relatively few and small), or representative plots (in the case of relatively many and/or large occurrences) that are recorded with a sub-meter accuracy GPS unit. If sensitive habitats documented within temporary work areas include jurisdictional wetlands with woody vegetation (i.e., areas mapped as wetlands dominated by willow and alder), the areas will be flagged for a certified arborist to proactively trim or coppice. Data collected will include the samedata collected at adjacent plots (Section 2.1) including the total (absolute) canopy cover, absolute cover of all dominant and associate plant species, and percent cover of non-native plant species (Appendix A). Pre-existing conditions data will be used as the baseline conditions on which performance standards are based (Section 3.1).

2.3 Photo Monitoring Points

To monitor changes over time, photo monitoring points from fixed stations will be established at sensitive habitats within work areas and in adjacent plots in areas not impacted by construction. Photo monitoring locations will be selected at random, with areas that are too small or not representative removed, and with the goal of establishing three to five points in each type of sensitive habitat (or whatever can be accomplished in a single monitoring day) and a single adjacent plot per habitat type. Locations will be recorded with a sub-meter accuracy GPS unit andmay be reduced post-construction to remove any locations that end up not impacted by construction. Photo monitoring will begin prior to construction. Photographs will be taken once each year in the same season, ideally after leaf-out has occurred and prior to senescence (i.e., between late spring and mid-summer). All photos will be taken at a standing position and a compass bearing of the direction the camera is facing will be recorded.

3 PERFORMANCE MONITORING PROGRAM

The monitoring program consists of annual performance monitoring of impacted areas within sensitive habitats as well as monitoring adjacent plots to account for any influence of non-Project related impacts. Impacted areas will be monitored until either performance standards are achieved or for a minimum of five years following construction completion. If monitoring in any given year indicates that a performance standard (Section 3.1) may not be met by Year 5, remedial actions will be recommended as described in Section 4.

3.1 Performance Standards

Four quantitative performance standards have been established for monitoring conditions of impacted sensitive habitats each year including total vegetative cover, species richness, relativenative cover, and maximum percent of invasive plants cover (as defined in Section 2.1). In addition, if areas previously identified as jurisdictional wetlands with woody vegetation (i.e., areas mapped as wetlands dominated by willow and alder) were impacted, post-construction regrowth will be monitored to ensure that coppiced or trimmed willows and/or alders are recovering.

A sensitive habitat will have met a performance standard when a metric has returned to pre- construction conditions, or, in the case of invasive plant cover, not exceeded the invasive plant cover documented pre-construction. Relative cover must return to 90% of baseline for non-woodyvegetation, and 85% of baseline for woody vegetation. If monitoring of the adjacent sensitive habitats that were not impacted by construction documents an overall change to the sensitive

habitat has occurred due to non-Project related factors (e.g., drought), then performance standardsmay be modified accordingly. For example, if total vegetative cover in adjacent plots has decreased by 10% from the baseline conditions (i.e., from 60% pre-construction to 50% cover during the monitoring period), then the performance standard for total vegetative cover in the monitoring site[s] may be similarly reduced.

In the Year 1 monitoring report, PG&E will specifically address the status of temporary wetlandimpacts to Coastal Wetlands to verify that project mitigation was sufficient. The CCC may require additional mitigation in the event that temporary impacts remain after one year to the extent that they are causing ongoing loss of habitat.

3.2 Methods

Annual performance monitoring will take place in late spring to mid-summer as detailed in thefollowing sections.

3.2.1 Vegetative cover and species composition

Performance criteria will be measured using the vegetation data form provided in Appendix A or similar. In each monitoring site, visual estimates of absolute cover will be recorded for each plantspecies with five percent or more cover, any invasive plant species present at any cover, bare ground, and organic litter/debris (e.g., dead plant material such as leaf litter or thatch).

Total vegetative cover for each monitoring site will be calculated by subtracting absolute cover ofbare ground and organic litter/debris from 100%. Species richness will be measured by the number of plant species present. Relative cover of native plant species will be calculated by summing the absolute cover for each native plant species and dividing by the sum of the absolute cover of all plant species recorded. Monitoring site results will be averaged across each sensitive habitat to determine if the performance standards are being met.

3.2.2 Photo monitoring and incidental observations

At each photo monitoring points (Section 2.3), photographs will be taken during annual performance monitoring to document changes in impacted areas over time. Photographs of othernotable features or incidental observations will also be taken during each monitoring event.

Additional photographs and qualitative observations on natural recruitment, any indications of pathogens, the distribution and abundance of invasive plants, and any other notable features mayalso be recorded.

3.3 Analysis and Reporting

Data will be analyzed to determine the current status of performance criteria. Inter-annual comparisons of the monitoring results may be made to assist in determining status and trends inrestoration performance and whether remedial actions may be necessary.

Annual monitoring reports will document plant species cover values from all sensitive habitats.Each year, a comparison of conditions in each sensitive habitat will be made against the pre- construction and reference site conditions and an analysis of performance standards will be performed. Reports will include the following sections:

- Introduction
- Maintenance Activities Performed
- Monitoring Methods
- Monitoring Results
- Achievement of Performance Standards (and any requested revisions to standards, if developed)
- Recommendations for Remedial Actions

An annual report summarizing findings will be submitted to applicable resource agencies as required. Reporting will facilitate development of any necessary adaptive response plans (e.g., remedial planting, invasive plant species control) to aid any unmet performance goals for the nextmonitoring year. If performance standards are not met, remedial actions will be implemented as soon as determined to be necessary (Section 4). In response to site-specific conditions, potential land-use changes, and/or information gained from maintenance and monitoring, PG&E may workwith the applicable resource agencies to adjust performance standards accordingly, as necessary and appropriate. A final monitoring report will be produced at the close of the monitoring period.

4 **REMEDIAL ACTIONS**

Should annual monitoring indicate that performance standards are unlikely to be met, an assessment of factors that may be contributing to poor performance will be included in the annualreport and remedial actions may need to be implemented. PG&E will consult with the applicable resource agencies prior to completing remedial actions outside the scope of this habitat restoration plan. Actions may include invasive plant management or supplemental plantings, as described below.

4.1 Invasive Plant Management

If invasive plant species become established and are approaching or exceeding the performance standard for invasive plant species (i.e., maximum percent of invasive plant cover documented pre-construction), they will be targeted for removal. Invasive plants will be removed using a combination of mechanical (e.g., mowing or pruning) and chemical (i.e., herbicide application) methods, where allowed. Mowing in upland areas may be recommended multiple times throughout the spring and summer to reduce the likelihood of non-native grasses producing viableseed. String-line trimming also may be used instead of mowing to better target invasive plants prior to seed development while not causing damage to native plants. Herbicide will be applied by a licensed applicator, following the products specifications and/or other Project permits. To reduce potential impacts to non-target organisms, herbicides will be considered that are registeredfor use around wetlands and waterbodies, such as AquaMaster® (Monsanto) and Rodeo® (Dow Chemical), both of which are mixtures of glyphosate and water, with the surfactant Agri-Dex®, as these formulations have been shown to be relatively non-toxic to fish and amphibians, but still effective at killing broadleaf forbs and grasses.

4.2 Planting

If it is determined by the PG&E biologist during annual monitoring that a passive restoration approach is unlikely to be successful within areas mapped as jurisdictional wetlands with woody

vegetation, supplemental planting may be used to ensure their restoration. As these areas are dominated by willow and alder, pole planting during winter months from adjacent, unaffected stands may be recommended. Should any additional planting be necessary, a qualified habitat restoration specialist may be consulted for details on plant spacing, planting densities, acreages ofplanting areas, total plants, and amount of seed, as applicable. PG&E will consult with the applicable resource agencies if it is determined that planting is required to achieve performance criteria.

4.3 Supplemental Water

No irrigation will be allowed during Year 4 and Year 5, or in the last two years before success isachieved.

5 **REFERENCES**

Cal-IPC (California Invasive Plant Council). 2020. California Invasive Plant Council Inventorydatabase. Website. <u>http://cal-ipc.org/plants/inventory</u> [Accessed April 2020].

CPUC (California Public Utilities Commission). 2020. Pacific Gas & Electric Humboldt Bay- Humboldt #1 60 kV Reconductoring Project (CPUC A. 19-02-004) Final Initial Study/MitigatedNegative Declaration. Prepared for California Public Utilities Commission by Environmental Science Associates.

Appendix A

Sample Vegetation Data Form

Site Name or	Number:		Sensitive Habitat:			
Plot Number:			Date:	Crew:		
/egetative Co Any managem	over: <u>%</u> nent recommendati	Bare Ground: ons?	<u>%</u>	Litter:	<u>%</u> (sum = 100%)	
lotes:						
	Species nar	ne ¹	% Absolute Cover	Collected?	Notes	
1						
2						
3						
4						
5						
6						
7						
8						
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10						
11						
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19						
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¹ Record any species with at least 5% cover or any invasive plant species at any cover (i.e., plant species with a Cal-IPC rating of moderate or high.

October 21, 2020

STATE OF CALIFORMIA . WATORAL RESOURCES AGENCY

CALIFORNIA COASTAL COMMISSION

ENERGY, OCEAN RESOURCES AND FEDERAL CONSISTENCY DIVISI 40 DRAWNT STREET 2017E 2020 281 (415) SON-5220 FAX (415) SB 5460 WMM COARTAL CAUGO



ELIMUND G. BROWN, JR., GOVERNO

April 3, 2018

Vick Germany Senior Land Planner Environmental Management (Gas Transmission) Pacific Gas & Electric Company 6111 Bollinger Canyon Rd., 3rd Floor #3110-C San Ramon, CA 94583

Re: CDP Nos. 9-17-0408 & 9-17-0408-A1 Special Condition 7 Compliance

Dear Ms. Germany,

Thank you for your March 28, 2018 submittal of the *Habitat Mitigation Plan for PG&E's Community Pipeline Safety Initiative* (HMP), dated March 23, 2018, which describes a program of wetland and riparian habitat restoration and tree planting to be carried out at two sites (Palco Marsh and Cock Robin Island) in Humboldt County. Commission Staff has reviewed the HMP and determined that it fulfils the pre-project requirements of Special Condition 7 of Coastal Development Permit (CDP) No. 9-17-0408, as amended (see Attachment A). Staff understands that you will continue to provide copies of any future revisions to or updates of the HMP as they become available.

As described in the HMP, PG&E proposes to restore 1.63 acres of wetland habitat at Palco Marsh, exceeding the restoration area requirement under Special Condition 7 by 1.1 acres. If successfully restored to the standards described in the HMP (and as required by the special condition), this excess acreage may be applied to wetland mitigation requirements under future CDPs for PG&E projects.

If you have questions about this matter, please contact Joseph Street in the Energy, Ocean Resources and Federal Consistency Division at (415) 904-5240.

Sincerely,

JOHN AINSWORTH Executive Director

JOSEPH STREET Senior Environmental Scientist Energy, Ocean Resources & Federal Consistency Division

Attachment A - Special Condition 7, CDP Nos. 9-17-0408 & 9-17-0408-A1

- 7. Habitat Mitigation Plan. PRIOR TO THE COMMENCEMENT OF PROJECT ACTIVITIES, the Permittee shall submit to the Executive Director for review and approval a Habitat Mitigation Plan that describes a compensatory mitigation program addressing the losses of riparian and wetland habitat, riparian woodland trees, and large conifer trees associated with the proposed project. The Executive Director shall complete the required review within 30 days. The Mitigation Plan may be directly implemented by the Permittee or by a separate entity receiving funding from the Permittee, or a combination of the two. In all cases, the Plan shall fulfill the requirements detailed below, and the Permittee shall be responsible for ensuring that the requirements of the condition are met.
 - A. Restoration Requirements: The Mitigation Plan shall provide for the following:
 - (1) Restoration of at least 4.15 acres of riparian woodland or scrub habitat, including a minimum of 372 native riparian trees, to compensate for the clearing of the clearing of 1.37 acres of these habitats and removal of 134 trees under the proposed project, as amended;
 - (2) Restoration of 0.53 acres of freshwater or estuarine wetland habitat to compensate for the clearing of 0.13 acres of these habitats under the proposed project, as amended;
 - (3) Planting of at least 385 native conifer trees to compensate for the removal of large trees under the proposed project.

Wherever possible, habitat restoration and tree planting shall occur at or adjacent to the project sites undergoing vegetation removal, consistent with pipeline maintenance and safety considerations and subject to landowner approval. If these or other factors preclude on-site habitat restoration, off-site mitigation locations within the coastal zone may be used. Any off-site locations for restoration and tree planting shall be identified, and a description of the existing conditions warranting restoration provided.

For the purposes of the Plan, "restoration" shall consist of the removal of invasive or non-native vegetation from an existing, degraded riparian or wetland habitat area, to be following by the planting of native trees, shrubs and herbaceous plants appropriate to the respective habitat type. The Plan shall provide a description of restoration activities including specific methodologies for invasive species removal and native species re-establishment, and shall identify the native species to be planted. Where feasible, invasive or non-native species shall be removed by hand, and any herbicide use will be minimized and limited to invasive/non-native species. Planting of native species shall take place in the fall to enable root establishment during the rainy season. Invasive species removal activities shall occur at least once annually following the initial treatment until performance criteria for native species cover have been achieved (see below).

B. <u>Reporting and Monitoring</u>: The Plan shall include and describe a five-year, annual monitoring program, including annual reporting to the Executive Director, to assure the long-term success of the habitat restoration and tree-planting program. Documentation for all years subsequent to the first year shall identify the success rate of the restored habitat area(s) and tree plantings, as measured by percent cover and percent of native vegetation within the area(s) (restored habitat) and percent survival (for trees). If after five years the restored habitat area(s) do not provide at least 80% cover of native vegetation and at least 80% total native vegetation, the Permittee shall either propose retreating and/or replanting the area(s) to achieve those levels or propose additional restoration areas. Similarly, if the five-year survival rate of the planted trees does not exceed 80%, the Permittee shall undertake additional tree-planting until this threshold is achieved.



Erin Rice Sr. Land Planner 2730 Gateway Oaks Dr., Rm 220, #235B Sacramento, CA 95833 (925) 724-9378 Email: E1RJ@pge.com

MEMO

Date: April 17, 2020

To: John Weber, CCC

From: Erin Rice, PG&E Land Planner

CC: Ode Bernstein, Jillian Blanchard, Jordan McKay (PG&E)

Re: Proposal for Restoration, Mitigation, and Replanting for Humboldt Bay-Humboldt #1 60kV Reconductoring Project

In February 2020 PG&E applied for a Coastal Development Permit (9-20-0092), a 404 NWP 12 (2018-00072N), and a 401 Water Quality Certification for the Humboldt Bay- Humboldt #1 60kV Reconductoring Project. In this memo, PG&E provides a summary of permanent and temporary impacts and: (1) outlines planning measures taken to avoid wetland impacts; (2) provides an overview of restoration for temporary impacts (detailed restoration plans will be provided in the Habitat Restoration Plan that is being prepared by PG&E); (3) proposes compensatory mitigation for permanent impacts to wetlands; and (4) proposes replanting for trees removed for this project.

PG&E requests your feedback on this memo so we can discuss more as necessary and move forward with securing mitigation and writing the Habitat Restoration Plan.

1. Planning Measures to Avoid Wetland Impacts

The following measures were employed during project planning to avoid and minimize impacts to wetlands:

- The project was designed to enable removal of 14 existing wood poles from wetland areas within the first 0.6 mile of the existing alignment east of Humboldt Bay Substation. These 14 poles will be replaced by 4 lattice steel towers, thereby reducing the number of structures requiring long term maintenance in wetland areas.
- Where feasible and appropriate, new poles will be installed by a combination of helicopter and ground crews. The use of helicopters will help to minimize ground disturbance in marsh wetland in the Coastal Zone along the alignment near Humboldt Bay Substation, as well as other wetlands along the alignment. Lattice steel towers will be installed in certain areas using the micropiling technique to minimize the area of wetland disturbance.

Re: Proposal for Restoration, Mitigation, and Replanting for Humboldt Bay- Humboldt #1 60kV Reconductoring Project

April 17, 2020

- Construction activities are scheduled to occur for a relatively short duration (from a few days to approximately one month at each location) and will be limited to defined work spaces.
- Project construction is scheduled so that reconductoring and pole and tower installation activities in wetland areas will generally occur in the dry season.
- If wet season construction is required because of line clearance or safety requirements, PG&E will use helicopter installation and temporary matting or other protection measures (e.g. rig mats, timber roads, plating, or other tracked vehicles [preferably rubber tracked]) to minimize temporary impacts and ground disturbance.

2. Summary of Temporary Impacts

This maintenance project will require temporary impacts to wetlands to accomplish the work (Table 4).

Permit	Temporary Impact (Acres)
Coastal Commission Wetlands: Coastal Development Permit 1-parameter, Coastal wetland	14.587
Corps and Regional Board Wetlands: 404 NWP 12 and 401 WQC (3- parameter)	1.66

- Of the 1.66 acres of Corps/Regional Board wetland impacts:
 - \circ 1.116 acres are within the Coastal Zone.
 - \circ 0.544 acres are outside the Coastal Zone.

Total temporary impacts to all types of wetlands: 14.587 + 0.544 = 15.131 acres

3. Habitat Restoration Plan.

Project activities are anticipated to result in greater than 1 acre of cumulative ground disturbance and therefore a Stormwater Pollution Prevention Plan (SWPPP) will be required for compliance with the Construction General Permit. The SWPPP typically dictates specific post-construction revegetation requirements, including a minimum percent vegetative cover on temporarily disturbed sites. PG&E anticipates that compliance with the SWPPP will require stabilization of all disturbed sites by achieving, at a minimum, 70% vegetative cover.

PG&E will prepare a Habitat Restoration Plan (HRP) that will cover revegetation of sensitive biological habitat including 1- and 3- parameter wetlands. The HRP will describe the restoration efforts proposed to reduce impacts to sensitive natural communities such as wetlands and riparian

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habitat to less-than-significant levels. The HRP will identify specific actions and monitoring methods to ensure that all temporary disturbed sites are restored to pre-project conditions.

The HRP also will include guidance for establishing reference sites and photo monitoring points, and will propose passive restoration for temporarily disturbed areas. Performance standards will be established to show that no new noxious weeds are being introduced and that impacted sites are returned to the same condition as nearby reference sites. The HRP also will include a preconstruction survey, to be conducted by qualified staff, in spring 2021 to characterize baseline vegetative and habitat conditions to establish 'pre-project' conditions. A rare plant survey will be conducted to determine and map the extent of Lyngbye's sedge (*Carex lyngbyei*) populations in the project area. Pre-construction survey results will be verified at the time of construction to account for land use changes and habitat type-conversion, if any. A qualified botanist will flag or otherwise mark (e.g. stake, fence) all special-status plant populations documented adjacent to construction work areas for avoidance as feasible. After project activities have been completed at a given worksite, all staking, fencing, or flagging will be removed.

In addition, the HRP will include the following measures for special status plant populations from the CEQA review process. If complete avoidance of special-status plant populations is not possible, PG&E will implement the following:

- PG&E will limit driving across special-status plant populations to the greatest extent feasible. Where direct disturbance to topsoil (except excavation) is unavoidable, matting and other protection measures (e.g., rig mats, timber roads, plating, or tracked vehicles) will be used to minimize soil compaction or destruction of underground plant structures. Matting and other protection measures will be approved by a qualified biologist before work begins at that location.
- For any unavoidable excavation required within Lyngbye's sedge populations, the upper 6 inches of topsoil containing the plant's rhizomes will be stockpiled. PG&E will use the stockpiled topsoil to restore the area after temporary construction has been completed.

4. Summary of Permanent Impacts

The impact numbers identified below reflect the net impacts and includes for the net increase that will result when wood poles are removed and replaced with wood poles, light duty steel poles, tubular steel pole concrete foundations, and lattice steel tower concrete foundations.

Re: Proposal for Restoration, Mitigation, and Replanting for Humboldt Bay- Humboldt #1 60kV Reconductoring Project

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Table 1: Permitted Permanent Wetland Impacts

Permit	Net Permanent Impact (sf)
Coastal Commission Wetlands: Coastal Development Permit	479.2
1-parameter, Coastal wetland	
Corps and Regional Board Wetlands: 404 NWP 12 and 401 WQC (3- parameter)	343

- Inside the Coastal Zone, 3-parameter wetlands are presumed to qualify as 1-parameter wetlands.
- Of the 343 sf of Corps/Regional Board permanent wetland impacts:
 - 340.4 are inside the Coastal Zone.
 - \circ 2.6 sf are outside the Coastal Zone.

Total permanent impacts to 3- and 1-parameter wetlands inside and outside the Coastal Zone boundary: 479.2 + 2.6 = 481.8 sf

5. Compensatory Mitigation for Permanent Impacts

Table 2: Proposed Mitigation for Permanent Wetland Impacts

Net Permanent Wetland Impacts (sf)	Proposed Mitigation at 4:1 (sf)
482	1928

Option A: Mitigation Bank and In-Lieu Fee Option

There are no USACE, RWQCB, or CCC-approved mitigation banks within the service territories extending into the areas impacted by the project. The closest approved mitigation bank, the Stillwater Plains Mitigation Bank near Redding, sells various wetland creation credits as well as a variety of other enhancement or conservation credits; however, the service area does not extend into the Coastal Zone or Coastal Commission jurisdiction. In addition, no approved In-Lieu Fee programs exist for wetland resource impacts in the area.

Option B: Wetland Creation Credits

Due to the absence of mitigation bank credits and an in-lieu fee option, PG&E proposes to fulfill anticipated compensatory mitigation obligations by utilizing existing mitigation credits generated from the Palco Marsh Wetland Restoration Plan. In 2018, PG&E in coordination with the California

Re: Proposal for Restoration, Mitigation, and Replanting for Humboldt Bay- Humboldt #1 60kV Reconductoring Project

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Coastal Commission (CCC), started a wetland enhancement and restoration project within Palco Marsh, located in Eureka, CA.

The Palco Marsh Wetland Restoration Plan is being undertaken by PG&E as a cost-effective and ecologically sound opportunity to expand the footprint of an existing wetland, with the intention of generating additional wetland mitigation credits for future PG&E activities in the Humboldt Bay Area, where as discussed above, Mitigation Banking opportunities are non-existent. PG&E worked with the CCC on this process and CCC provided the attached letter memorializing that excess credit generated from the project could be applied to future projects in the Coastal Zone (Exhibit 1). The proposed mitigation site provides access to currently available wetland credits, and is preferential to the creation of small, isolated (i.e. "postage stamp) mitigation sites. In this case, utilizing existing credits from a large established wetland enhancement project is demonstrably superior to on-site creation in terms of habitat quality and ecological value. Enhancement and restoration details including herbicide spraying, physical removal of invasive vegetation, and replanting with wetland plants are described in the Palco Marsh Wetland Restoration Plan (Exhibit 2).

Exhibit 3 is the Year-1 Report for CDPs 9-17-0408 and 9-17-0408-A1, including the status of the Palco Marsh Wetland Enhancement Project.

6. Tree Removal and Offsite Replanting

The project also includes unavoidable tree removal to maintain the existing utility line. Table 3 identifies the number of native trees that may be removed by the project.¹

Тгее Туре	Number of Trees (>4" dbh)
Willow thicket	Stems ranging between 1" and 8" dbh
Red Alders	7
Maple	7
Redwoods	3

Table 3: Tree Removals

Removing these trees is not only necessary to facilitate construction, but will provide additional safety and vegetation clearance for the long term. On site replanting is infeasible for lack of suitable space nearby and is unlikely to succeed because PG&E does not have the ability to control establishing new vegetation on individual private properties. Moreover, planting within the PG&E alignment could cause future vegetation clearance issues. Accordingly, PG&E proposes off-site

¹ Trees are defined as measuring greater than 4 inches in diameter at breast height (dbh) at the time of the arborist survey in July 2018. It is possible that additional trees may grow to be greater than 4 inches dbh by the time of construction. All trees to be removed will be measured at the time of construction.

Re: Proposal for Restoration, Mitigation, and Replanting for Humboldt Bay- Humboldt #1 60kV Reconductoring Project

April 17, 2020

replanting to compensate for these tree removals. PG&E currently has an existing agreement on Cock Robin Island with CDFW to replant trees. This area is located in the Eel River approximately 9 miles south of the Humboldt Bay Substation. PG&E currently has planted an area of 4.1 acres of native riparian species. The tree species include Black cottonwood, Red alder and Wax myrtle. The shrub species include Coyote brush, Red elderberry, Twinberry, Salmonberry, Red-flowering currant, Thimbleberry and Blue Blossom. This planting palette was developed to mimic the riparian forest that is present on the fringe of the planting area. The goal of the replanting effort will be for the riparian forest to fill in overtime and restore the previously cleared hayfield. All replanted material has been locally grown and sourced. PG&E proposes to expand the current planting area on Cock Robin Island at a 2:1 ratio with species currently planted on site.

Attachments:

Exhibit 1: California Coastal Commission Letter of Credit Exhibit 2: Palco Marsh Wetland Restoration Plan Exhibit 3: Year-1 Report for CDPs 9-17-0408 and 9-17-0408-A1