

Attachment A
Special-Status Plant Table

TABLE A-1

Special-status Plant Species Potentially Occurring in the Project Area PG&E Gas Line 210A Inspection Project Area

Common name <i>Scientific name</i>	Listing Status ²		Flowering Period	Habitat Preferences ³	Potential to Occur within the Project Sites ⁴
	Federal	State			
Ferris' milk-vetch <i>Astragalus tener</i> var. <i>ferrisiae</i>	-	-	Apr-May	Vernally mesic meadows and seeps, valley and foothill grassland (subalkaline flats). 2 - 75 meters.	MP 1.38 Moderate . Nearest known location is < 9 miles. MLV 4.88 Moderate . Nearest known location is > 10 miles.
Alkali milk-vetch <i>Astragalus tener</i> var. <i>tener</i>	-	-	Mar-Jun	Playas, valley and foothill grassland (adobe clay), vernal pools (alkaline). 1 - 60 meters.	MP 1.38 High . Nearest known location is < 2 miles. MLV 4.88 High . Nearest known location is < 2 miles.
Heartscale <i>Atriplex cordulata</i>	-	-	Apr-Oct	Chenopod scrub, meadows and seeps, valley and foothill grassland (sandy/saline or alkaline). 1 - 375 meters.	MP 1.38 High . Nearest known location is < 2 miles. MLV 4.88 Moderate . Nearest known location is < 4 miles. Habitat at project site is marginal.
Brittlescale <i>Atriplex depressa</i>	-	-	Apr-Oct	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland, Vernal pools (alkaline, clay). 1 - 320 meters.	MP 1.38 High . Nearest known location is < 4 miles. MLV 4.88 Moderate . Nearest known location is < 4 miles. Habitat at project site is marginal.
San Joaquin spearscale <i>Atriplex joaquiniana</i>	-	-	Apr-Oct	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland (alkaline). 1 - 835 meters.	MP 1.38 High . Nearest known location is < 10 miles. MLV 4.88 Moderate . Nearest known location is < 5 miles. Habitat at project site is marginal.
Vernal pool smallscale <i>Atriplex persistens</i>	-	-	Jun-Oct	Vernal pools (alkaline). 10 - 115 meters.	MP 1.38 High . Nearest known location is < 4 miles. MLV 4.88 Moderate . Nearest known location is < 4 miles. Habitat at project site is marginal.
Pappose tarplant <i>Centromadia parryi</i> ssp. <i>parryi</i>	-	-	May-Nov	Chaparral, Coastal prairie, Meadows and seeps, Coastal salt marshes, Valley and foothill grassland (vernally mesic, often alkaline). 2 - 420 meters.	MP 1.38 Present - population found at site during reconnaissance survey. MLV 4.88 High . Known location < 2 miles.

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	Federal	State			
Dwarf downingia <i>Downingia pusilla</i>	-	-	List 2.2 Mar-May	Valley and foothill grassland (mesic), Vernal pools. 1 - 445 meters.	MP 1.38 High . Nearest known location is < 4 miles. MLV 4.88 Moderate . Nearest known location is < 4 miles. Habitat at project site is marginal.
Fragrant fritillary <i>Fritillaria liliacea</i>	-	-	List 1B.2 Feb-Apr	Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland (often serpentine). 3 - 410 meters.	MP 1.38 High . Nearest known location is < 2 miles. MLV 4.88 Moderate . Nearest known location is < 2 miles. Habitat at project site is marginal.
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	-	-	List 1B.2 Apr-Aug	Marshes and swamps (lake margins), Vernal pools (clay). 10 - 2375 meters.	MP 1.38 High . Nearest known location is < 2 miles. MLV 4.88 Moderate . Nearest known location is < 5 miles. Habitat at project site is marginal.
Carquinez goldenbush <i>Isocoma arguta</i>	-	-	List 1B.1 Aug-Dec	Valley and foothill grassland (alkaline). 1 - 20 meters.	MP 1.38 Moderate . Nearest known location is < 1 mile. No plants seen at project site during reconnaissance. MLV 4.88 Moderate . Nearest known location is < 1 mile. Habitat at project site is marginal. No plants seen at project site during reconnaissance.
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE	-	List 1B.1 Mar-Jun	Cismontane woodland, Playas (alkaline), Valley and foothill grassland, Vernal pools (mesic). 0 - 470 meters.	MP 1.38 Moderate . Nearest known location is < 10 miles. MLV 4.88 Moderate . Nearest known location is < 2 mile. Habitat at project site is marginal.
Legenere <i>Legenere limosa</i>	-	-	List 1B.1 Apr-Jun	Vernal pools. 1 - 880 meters.	MP 1.38 High . Nearest known location is < 2 miles. MLV 4.88 Moderate . Nearest known location is < 2 miles. Habitat at project site is marginal.
Heckard's pepper-grass <i>Lepidium latipes</i> var. <i>heckardii</i>	-	-	List 1B.2 Mar-May	Valley and foothill grassland (alkaline flats). 2 - 200 meters.	MP 1.38 Moderate . Nearest known location is < 5 miles. MLV 4.88 Moderate . Nearest known location is < 5 miles.

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	Federal	State			
Baker's navarretia <i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	-	-	Apr-Jul	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland Vernal pools (mesic). 5 - 1740 meters.	MP 1.38 High . Nearest known location is < 4 miles. MLV 4.88 Moderate . Nearest known location is < 4 miles. Habitat at project site is marginal.
Colusa grass <i>Neostapfia colusana</i>	FT	SE	May-Aug	Vernal pools (adobe, large). 5 - 200 meters.	MP 1.38 High . Nearest known location is < 2 miles. MLV 4.88 Moderate . Nearest known location is < 2 miles. Habitat at project site is marginal.
San Joaquin Valley Orcutt grass <i>Orcuttia inaequalis</i>	FT	SE	Apr-Sep	Vernal pools. 10 - 755 meters.	MP 1.38 Moderate . Nearest known location is < 5 miles. Vernal pool present at project site. MLV 4.88 Moderate . Nearest known location is < 2 miles. Habitat at project site is marginal.
Bearded popcorn-flower <i>Plagiobothrys hystriculus</i>	-	-	Apr-May	Valley and foothill grassland (mesic), Vernal pools (margins/often vernal swales). 0 - 274 meters.	MP 1.38 High . Nearest known location < 2 miles. Vernal pool present at project site. MLV 4.88 Moderate . Nearest known location is < 2 miles. Habitat at project site is marginal.
Showy Indian clover <i>Trifolium amoenum</i>	FE	-	Apr-Jun	Coastal bluff scrub, Valley and foothill grassland (sometimes serpentine). 5 - 415 meters.	MP 1.38 Moderate . Nearest known location < 10 miles.
Saline clover <i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	-	-	Apr-Jun	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), Vernal pools. 0 - 300 meters.	MP 1.38 Moderate . Nearest known location < 10 miles. MLV 4.88 Moderate . Nearest known location is < 10 miles.
Solano grass <i>Tuctoria mucronata</i>	-	-	Apr-Aug	Valley and foothill grassland (mesic), Vernal pools. 5 - 10 meters.	MP 1.38 Moderate . Nearest known location < 2 miles.

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	Federal	State			
Notes:					
1. Scientific nomenclature based on Hickman (1993) and Jepson Online Interchange (2008); common names from Hickman (1993), and CalFlora (2008).					
2. Conservation status definitions are as follows:					
U.S. Fish and Wildlife Service designations:					
FE	Endangered: Any species in danger of extinction throughout all or a significant portion of its range.				
FT	Threatened: Any species likely to become endangered within the foreseeable future.				
California Department of Fish and Game designations:					
SE	Endangered: Any species in danger of extinction throughout all or a significant portion of its range.				
SR	Rare: Any species not currently threatened with extinction, but in such small numbers throughout its range that it may become endangered if its present environment worsens.				
California Native Plant Society designations:					
1B	Plants rare, threatened or endangered in California and elsewhere.				
2	Plants rare, threatened or endangered in California, but more common elsewhere.				
3	Plants for which more information is needed – a review list.				
4	Plants of limited distribution – a watch list.				
California Native Plant Society threat categories:					
.1	Seriously endangered in California.				
.2	Fairly endangered in California.				
.3	Not very endangered in California.				
3. Habitat information from the California Native Plant Society's on-line Inventory of Rare and Endangered Plants of California (2008).					
4. A plant species was determined to have potential to occur in a project site if its known or expected geographic range includes the vicinity of the project site, and if its known or expected habitat is represented within or near the project site. Sources: CNPS 2008, CNDDB 2008b, Jepson Online Interchange 2008.					

Attachment B
Special-Status Wildlife Species Table

TABLE B-1
Special-status Wildlife Species with Potential to Occur at the Work Site Locations.

Common Name Scientific Name	Status* Federal/State	Habitat Requirements	Project Location(s) Potential to Occur
Invertebrates			
Conservancy Shrimp <i>Branchinecta conservatio</i>	FT / -	Playa lakes.	No suitable habitat at any project locations.
Delta green ground beetle <i>Elaphrus viridis</i>	FT / -	Vernal pool/grassland complexes in central Solano County. Sandy mud substrate where it slopes gently into the water, with low-growing vegetation, 25-100% cover.	MP 1.38: High potential to occur. Suitable habitat present within 50' x 190' parcel to west of valve lot. Known occurrences and critical habitat within ~1 mile N. MLV 4.88: High potential to occur. Suitable habitat present. Known occurrences ~0.5 mile NE.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT / -	Inhabits vernal pools and swales containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed & highly turbid.	MP 1.38: High potential to occur. Suitable habitat present in vernal pool and roadside ditches. Known occurrences ~1 mile S. MLV 4.88: High potential to occur. Suitable habitat present. Critical habitat and known occurrences for this species are located ~1 mile W.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE / -	Inhabits vernal pools and swales containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed & highly turbid.	MP 1.38: Moderate potential to occur. Suitable habitat present in vernal pool and roadside ditches. Known occurrences ~1 mile N. MLV 4.88: Moderate potential to occur. Suitable habitat present. Known occurrences ~1 mile W.
Fish			
Coho Salmon <i>Oncorhynchus kisutch</i>	FT/ST	Spawning habitat is small streams with stable gravel substrates.	No potential for effect to this or any fish species. All project activity to be conducted in uplands well away from any streams.
Chinook salmon, spring run <i>Oncorhynchus tshawytscha</i>	FT/ST	Adult Chinook entering Sacramento and San Joaquin Rivers March through September, with juveniles emerging November through March. (Yoshiyama et al. 1998)	No potential for effect to this or any fish species. All project activity to be conducted in uplands well away from any streams.

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Common Name Scientific Name	Status* Federal/State	Habitat Requirements	Project Location(s) Potential to Occur
Chinook salmon, winter run <i>Oncorhynchus tshawytscha</i>	FE/SE	Adult Chinook entering Sacramento and San Joaquin Rivers December through July, with juveniles emerging July through October. (Yoshiyama et al. 1998)	No potential for effect to this or any fish species. All project activity to be conducted in uplands well away from any streams.
Delta smelt <i>Hypomesus transpacificus</i>	FT/FT	Found in the Sacramento-San Joaquin Delta, and seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay.	No potential for effect to this or any fish species. All project activity to be conducted in uplands well away from any streams.
Green sturgeon <i>Acipenser medirostris</i>	FT/CSC	Spawns in the Sacramento River near the confluence with the Feather River. Juveniles can remain in the Delta and SF bay for their first 4 years before exhibiting anadromy.	No potential for effect to this or any fish species. All project activity to be conducted in uplands well away from any streams.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	-/CSC	Greater Sacramento San Joaquin Delta with a preference for spawning on floodplains.	No potential for effect to this or any fish species. All project activity to be conducted in uplands well away from any streams.
Steelhead <i>Oncorhynchus mykiss</i>	FT/-	Spawns in creeks and rivers from Southern California up to Alaska. Present in the Sacramento and San Joaquin Rivers and their tributaries, and in many tributaries to SF Bay, including Green Valley and Suisun valley creeks.	No potential for effect to this or any fish species. All project activity to be conducted in uplands well away from any streams.
Amphibians			
California tiger salamander <i>Ambystoma californiense</i>	FT/CSC	Reproduce in vernal pools and/or seasonal water sources. Aestivate during dry months in underground refuges, especially ground squirrel burrows.	MP 1.38: High potential to occur. Suitable breeding habitat exists in roadside ditches. Upland habitat is present within 50' x 190' parcel to west of valve lot. Critical habitat for this species is located immediately across Creed Road. MLV 4.88: Moderate potential to occur during dry season. Potential breeding habitat present is of marginal quality. Known breeding pools approx. ¾ miles NE.
California red-legged frog <i>Rana draytonii</i>	FT/CSC	Breeds in ponds and pools in slow-moving streams with emergent vegetation; adjacent upland habitats are often used for temporary refuges or dispersal movements.	MP 1.38 & MLV 4.88: No or extremely low potential to occur. Suitable habitat is not present.

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Common Name Scientific Name	Status* Federal/State	Habitat Requirements	Project Location(s) Potential to Occur
Reptiles			
Northwestern pond turtle <i>Emys [Clemmys] marmorata marmorata</i>	-/CSC	Permanent and seasonal ponds, lakes, and slow-moving parts of streams.	MP 1.38 & MLV 4.88: No potential to occur. Suitable habitat not present.
Birds			
Golden eagle <i>Aquila chrysaetos</i>	-/CFP	Rolling foothills, mountain areas, sage-juniper flats, & desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	MP 1.38: High potential to occur. Suitable foraging habitat present; however, no breeding habitat is present on the work site. MLV 4.88: High potential to occur. Suitable foraging habitat present; however, no breeding habitat is present.
Loggerhead shrike <i>Lanius ludovicianus</i>	-/CSC	Semi-open country such as grasslands and open woodlands with lookout posts; wires, trees, or scrub. Breeds in semi-open terrain such as grasslands with scattered trees or shrubs.	All locations: High potential to occur. Suitable foraging or breeding habitat in the vicinity of all work sites. One individual was observed in the vicinity of MLV 4.88 during surveys on 11/11/08.
Mountain plover <i>Charadrius montanus</i>	-/CSC	Short grasslands, freshly plowed fields, newly sprouting grain fields, & sometimes sod farms. Prefers short vegetation, bare ground with flat topography and grazed areas with burrowing rodents.	MP 1.38: High potential to occur. Suitable foraging habitat within 50' x 190' parcel to west of valve lot. This species only winters in Solano County. CNDDB occurrence surrounding this work location. MLV 4.88: Moderate potential to occur. Suitable foraging habitat within work site.
Northern harrier <i>Circus cyaneus</i>	-/CSC	Wet and dry open country such as marshes and grasslands with good ground cover. Nests on the ground.	All locations: High potential to occur. Suitable foraging habitat exists in the vicinity of all work locations; however, no breeding habitat is present.
Saltmarsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	-/CSC	Fresh and saltwater marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	MP 1.38 & MLV 4.88: Very Low potential to occur. No suitable habitat in project area.

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Common Name Scientific Name	Status* Federal/State	Habitat Requirements	Project Location(s) Potential to Occur
Short-eared owl <i>Asio flammeus</i>	-/CSC	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	MP 1.38: High potential to occur. Suitable foraging habitat within 50' x 190' parcel W of valve lot; however, no breeding habitat is present on the work site. MLV 4.88: High potential to occur. Suitable foraging habitat within work site; however, no breeding habitat is present.
Suisun song sparrow <i>Melospiza melodia maxillaris</i>	-/CSC	Brackish water marshes surrounding Suisun Bay. Inhabits cattails, tules and other sedges, and salicornia; also known to frequent tangles bordering sloughs.	MP 1.38 & MLV 4.88: Moderate potential to occur. Suitable foraging or nesting habitat in the vicinity of all work sites.
Swainson's hawk <i>Buteo swainsoni</i>	-/ST	Breeds in trees with adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	MP 1.38: Low potential to occur. Marginal foraging habitat exists within 50' x 190' parcel W of valve lot; however, no breeding habitat is present on work site. MLV 4.88: Low potential to occur. Marginal foraging habitat exists within work site. Short grassland present on at the work site is not preferred habitat for this species.
Tricolored blackbird <i>Agelaius tricolor</i>	-/CSC	Highly colonial species requires open water, protected nesting substrate, and foraging area with insect prey near colony. Nests in freshwater marshes containing emergent vegetation such as cattails and tules.	All locations: Very low potential to occur. Open grassland at the work site locations is not the preferred foraging habitat for this species. No nesting habitat present.
White-tailed kite <i>Elanus leucurus</i>	-/CFP	Nests in dense oak, willow or other large tree stands and forages over open grasslands. A coast live oak tree is often chosen as a nest site.	MP 1.38: High potential to occur. Suitable breeding habitat not present. Suitable foraging habitat present within 50' x 190' parcel W of valve lot. MLV 4.88: High potential to occur. Suitable breeding habitat not present. Suitable foraging habitat present within work area.

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Common Name Scientific Name	Status* Federal/State	Habitat Requirements	Project Location(s) Potential to Occur
Western burrowing owl <i>Athene cunicularia hypugae</i>	-/CSC	Nests in burrows and forages in low-growing grasslands and other open, semi-arid habitats that support small burrowing mammals.	MP 1.38: Low potential to occur. Suitable foraging habitat in 50' x 190' parcel W of valve lot, but no burrows observed during survey on Nov. 11, 2008. MLV 4.88: Low potential to occur. Suitable foraging habitat within work site, but no burrows observed during survey on Nov. 11, 2008.
Mammals			
Salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	FE/SE, CFP	found in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat. Does not burrow instead; builds loosely organized nests and requires higher areas for flood escape.	MP 1.38 & MLV 4.88: No suitable habitat at any of the project locations.
Suisun shrew <i>Sorex ornatus sinuosus</i>	-/CSC	Tidal marshes of the northern shores of San Pablo and Suisun Bays; require dense low-lying cover and driftweed and other litter above the mean high tide line for nesting and foraging.	MP 1.38 & MLV 4.88: No potential to occur. No suitable habitat.

Attachment C
Mitigation Monitoring and Reporting Plan

PG&E Gas Line 210A and 210B In-Line Investigation Project Mitigation Monitoring and Reporting Plan

1.0 Introduction

Authority and Purpose of the Program

The State Water Resources Control Board (SWRCB) Initial Study/Mitigated Negative Declaration (IS/MND) for the PG&E Gas Line 210A and 210B In-Line Investigation Project (Project) includes a series of mitigation, avoidance, and protection measures intended to minimize the environmental impacts of project construction and restoration. CEQA and SWRCB require that these measures be summarized in a Mitigation Monitoring and Reporting Plan (MMRP). This document is the required MMRP.

The purpose of this MMRP is to catalog both the mitigation measures adopted by the SWRCB and the avoidance and protection measures (APMs) proposed by the Applicant, to specify a process that will ensure that the measures are implemented, and to establish that they have reduced potential environmental impacts to acceptable levels.

As the CEQA lead agency, the SWRCB is required to monitor Project construction and restoration in order to confirm implementation of mitigation and applicant-proposed avoidance and protection measures. In addition, the SWRCB is responsible for ensuring compliance with the MMRP. The SWRCB may delegate these duties and responsibilities consultants or the Applicant.

Program Adoption Process

As part of the adoption of the IS/MND, SWRCB will confirm that this MMRP complies with CEQA Guidelines Section 15074(d), which mandates the preparation of monitoring provisions for implementation of mitigation assigned as part of project approval or adoption. As the CEQA lead agency for this Project, the SWRCB intends to adopt this MMRP concurrent with the adoption of the IS/MND.

Organization of the MMRP

This MMRP includes three sections: Section 1.0 discusses the purpose of the MMRP and lists the agencies with permitting authority over the Project; Section 2.0 specifies the parties or agencies responsible for the implementing the MMRP; and Section 3.0 identifies implementation and monitoring procedures.

2.0 Roles and Responsibilities

Mitigation Implementation

Implementing measures assigned to mitigate impacts associated with the Project is the SWRCB's responsibility, however, this responsibility will be delegated to PG&E, or its' designated representative during construction and restoration activities. Therefore, PG&E will be responsible for ensuring that the Project complies with the MMRP and other permit

conditions imposed by other responsible agencies. A list of agencies with jurisdiction over the Project is included in Table 1.

TABLE 1

Agency	Jurisdiction within Project Area	Contact
USACE	Placement of temporary fill in waters of the U.S. located north and south of Creed Road (IS/MND Figures 1 through 3).	Justin Yee Department of the Army San Francisco District U.S. Army Corps of Engineers 1455 Market Street San Francisco, CA, 94103-1398 (415) 503-6788
USFWS	Endangered Species Act consultation. Addresses potential Project impacts to federally-threatened vernal pool fairy shrimp (<i>Branchinecta lynchi</i>), vernal pool tadpole shrimp (<i>Lepidurus packardii</i>), and California tiger salamander (<i>Ambystoma californiense</i>) north and south of Creed Road (IS/MND Figures 1 through 3).	Michelle Tovar, Endangered Species Program, Sacramento Fish and Wildlife Office (916) 414-6600
SWRCB	Compliance with Clean Water Act Section 401.	Cliff Harvey 401 Certification & Wetlands Unit Division of Water Quality SWRCB 1001 I Street, 15th Floor Sacramento, CA 95814 (916) 558-1709

Mitigation Monitoring

As discussed previously, the SWRCB is responsible for ensuring compliance with and implementation of the MMRP. Consistent with SWRCB practices, implementation and monitoring duties will be delegated to PG&E or its designated environmental monitors or consultants. As a result, PG&E's monitors/consultants will be delegated authority by the SWRCB to enforce the MMRP and to authorize any variance or deviation from the procedures, as long as the variance is consistent with CEQA, approved by the SWRCB, and does not cause new significant impacts. Any proposed variance that could result in a potentially significant environmental effect will be evaluated to determine whether supplemental CEQA review and additional mitigation measures are needed. In the event of the need for a proposed variance or deviation from the adopted MND or MMRP, the implementation of such deviation, shall be reported immediately to the SWRCB and the authorized construction monitor for review and approval.

Under this delegated responsibility, PG&E will designate specific personnel to ensure implementation of mitigation during construction activities. The designated personnel will be responsible for submitting all compliance documentation and reports to PG&E and the SWRCB in a timely manner and prepare required resource agency submittals. These personnel will also be delegated the authority to halt construction activities found to be inconsistent with the MMRP objectives or conditions of approval.

In addition, PG&E will be responsible for demonstrating compliance with other agencies' permit conditions. PG&E and the authorized personnel will ensure that its construction contractors understand and adhere to the MMRP performance requirements and other contractual requirements related to the implementation of the MMRP.

Table 2 provides a summary of the MMRP. It lists each potential environmental impact, the corresponding monitoring activity/plan, and the party responsible for ensuring MMRP compliance.

Mitigation Enforcement

In addition to implementation of the MMRP, PG&E is also responsible for enforcing the established performance standards and reporting the success of their implementation to the SWRCB through a mutually acceptable reporting program. This program will be finalized following adoption of the IS/MND and MMRP and in place prior to construction. The PG&E onsite environmental monitor(s)/consultant (s) will enforce implementation of the MMRP. The monitor will note problems and report them to PG&E who will in turn inform the SWRCB. If alternative mitigation measures are identified that would be equally effective in mitigating the identified impacts, the implementation of these alternative measures will not occur until confirmation is received from the SWRCB.

The SWRCB has the authority to halt any construction, operation, or maintenance activity associated with the Project if the activity is determined to be a deviation from the approved project or adopted mitigation measures. The SWRCB may assign this authority to the environmental monitor for each construction phase or spread.

Mitigation Compliance

PG&E is responsible for successfully implementing all adopted mitigation measures in the MMRP. Performance standards for successful mitigation are included in each mitigation measure to include requirements for obtaining permits or avoiding a specific impact or area entirely.

Dispute Resolution

Disputes and complaints (including those of the public) will be directed to the SWRCB's designated Project Manager for resolution. The SWRCB Project Manager will attempt to resolve the dispute. If this informal process fails, then the SWRCB Project Manager may initiate an enforcement or compliance action to address deviations from the permitted project and adopted MMRP.

3.0 General Monitoring Procedures

Lead Environmental Monitor

PG&E is responsible for ensuring coordination of mitigation monitoring procedures for the construction and restoration activities with the SWQCB and the authorized environmental monitors/consultants. The lead Environmental Monitor will oversee implementation of the monitoring procedures, coordinate with each environmental monitor assigned to each

construction phase or spread, and be onsite during any project-related activity with the potential to result in a significant impact for which mitigation is required. The environmental monitor is also responsible to ensure that all MMRP procedures are followed.

Construction Personnel

Many of the mitigation measures require compliance with MMRP requirements by construction personnel. Successful implementation of the MMRP will include:

- ✓ Compliance procedures written into contracts between PG&E, authorized monitors/consultants, and construction contractors. Procedures for implementation by construction personnel will be compiled into a separate consent agreement for review and signature by each construction employee.
- ✓ Regular pre-construction meetings to inform and train all construction personnel about the MMRP requirements.
- ✓ Concise summaries of MMRP procedures provided to construction supervisors for measures requiring their attention.

General Reporting Procedures

Site visits and specified monitoring procedures will be reported by each environmental monitor assigned to the project. A monitoring record form will be submitted to the environmental monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the environmental monitor. A checklist will be developed and maintained by the environmental monitor to track all procedures required for each mitigation measure and to ensure adherence to the timing specified for the procedures. The environmental monitor will note any problems that may occur and take appropriate action to rectify the problems. The Applicant shall provide the State Water Board with written annual reports of the project, which shall include progress of any project-related activity, resulting impacts, mitigation implemented, and all other noteworthy elements of the project. Annual reports shall be required as long as mitigation measures are applicable.

Condition Effectiveness Review

As required by CEQA, the SWRCB must evaluate the effectiveness of implemented mitigation measures. In order to fulfill its statutory mandates to mitigate or avoid significant effects on the environment and to design a mitigation monitoring program to ensure compliance during Project implementation (CEQA 21081.6), the SWRCB may:

- ✓ conduct a comprehensive review of conditions which are not effectively mitigating impacts at any time it deems appropriate, consistent with standard SWRCB dispute resolution procedures; and
- ✓ determine that measures are not adequately mitigating environmental impacts, or that recent proven technological advances could provide more effective mitigation. If

this occurs, then the SWRCB may impose additional reasonable conditions to effectively mitigate these impacts.

TABLE 2
Gas Line 210A and 210B ILI Repair Project MMRP Summary

		Implementation Duration		Monitoring Duration		Responsibility ²	
Issue Area/Impact	Measure	One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
		Mitigation Measures					
Biological Resources							
Have a substantial adverse effect, on any species identified as a candidate, sensitive, or special status species	BIO-1: To minimize effects of the proposed project on the California tiger salamander, vernal pool fairy shrimp, and vernal pool tadpole shrimp, PG&E will purchase mitigation credits at an USFWS-approved mitigation bank.	Prior to construction		Prior to construction		PG&E	PG&E, reporting to SWRCB
	BIO-2: PG&E will purchase 0.276 acres of vernal pool preservation credits and 0.136 acres of vernal pool creation credits at a vernal pool conservation bank approved by USFWS prior to the start of earth-moving activities.	Prior to construction		Prior to construction		PG&E	PG&E, reporting to SWRCB
	BIO-3: PG&E will restore the 0.2 acres of habitat temporarily affected by the project. PG&E will also permanently preserve an additional 0.22 acres of salamander habitat by purchasing credits from a USFWS-approved conservation bank. Additionally, PG&E proposes to mitigate for the permanent loss of 0.24 acres of upland dispersal habitat by purchasing 0.75 acre of CTS upland habitat credits from a USFWS-approved conservation bank.	During Restoration	During Restoration		During Restoration		PG&E

TABLE 2
Gas Line 210A and 210B ILI Repair Project MMRP Summary

OAS LINE 2104 AND 2105 DUST IMPACT ANALYSIS - Summary									
Issue Area/Impact	Measure	Implementation Duration			Monitoring Duration			Responsibility ²	
		One-time	Ongoing		One-time	Ongoing		Implementation	Monitoring
PG&E Avoidance and Protection Measures ¹									
Air Quality									
Temporary Construction related fugitive dust generation	APM-AQ-1: Water all active construction areas at least twice daily during dry conditions.		During Construction			During Construction		PG&E	PG&E, reporting to SWRCB
	APM-AQ-2: Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of free board.		During Construction			During Construction		PG&E	PG&E, reporting to SWRCB
	APM-AQ-3: Pave, apply water three times daily (during dry conditions), or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.		During Construction			During Construction		PG&E	PG&E, reporting to SWRCB
	APM-AQ-4: Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.		During Construction			During Construction		PG&E	PG&E, reporting to SWRCB
	APM-AQ-5: Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.		During Construction			During Construction		PG&E	PG&E, reporting to SWRCB
	APM-AQ-6: Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).		During Construction			During Construction		PG&E	PG&E, reporting to SWRCB
	APM-AQ-7: Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.).		During Construction			During Construction		PG&E	PG&E, reporting to SWRCB

TABLE 2
Gas Line 210A and 210B I/I Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
Temporary Construction related GHG/ CO ₂ emissions	APM-AQ-8: Limit traffic speeds on unpaved roads to 15 mph.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	APM-AQ-9: Install sandbags or other erosion control measures to prevent silt runoff to public roadways.	During Construction	During Construction	During Construction	During Construction	PG&E	PG&E, reporting to SWRCB
	APM-AQ-10: Replant vegetation in disturbed areas as quickly as possible.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	APM-GHG-1: Encouraging the use of bio-diesel fuel for diesel-powered equipment and vehicles.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	APM-GHG-2: Encouraging construction workers to carpool.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
Biological Resources	APM-GHG-3: Encouraging the recycling of construction waste.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	APM-BIO-1: An employee education program will be conducted, consisting of a brief presentation to explain endangered species concerns to contractors, their employees, and any other personnel involved in the Project. The program will include the following: a description of special-status species and their habitat needs; a report of the occurrence of these species in the Project area; an explanation of the status of	Prior to construction		Prior to construction		PG&E	PG&E, reporting to SWRCB

TABLE 2
Gas Line 210A and 210B ILI Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
	these species and their protection under the Federal Endangered Species Act, California Endangered Species Act, and other statutes; and a list of measures being taken to reduce impacts to the species during Project construction and implementation. A fact sheet conveying this information will be prepared for distribution to the above-mentioned people and anyone else who may enter the Project site. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures. To the extent possible, nighttime construction will be minimized. Construction crews will be informed during the education program meeting that, to the extent possible, travel within the marked Project site will be restricted to established roadbeds. Established roadbeds include all pre-existing and Project-constructed unimproved, as well as, improved roads.						
	APM-BIO-2: Biological monitors will be onsite during all ground-disturbing work within sensitive biological areas and the seasonal wetlands located adjacent to MP 4.88 and MP 1.38. Temporary work areas will be clearly flagged and marked. To the extent feasible, all work within sensitive biological areas will be conducted during the dry season.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	APM-BIO-3: Dust control measures will be implemented during construction in the dry season. Work areas and dirt access roads will		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB

TABLE 2
Gas Line 210A and 210B ILI Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
	be watered regularly to minimize airborne dust and soil particles generated by construction.						

TABLE 2
Gas Line 210A and 210B ILI Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
APM-BIO-4: The potential for adverse effects to water quality in vernal pools or habitat within the Project area will be avoided by implementing temporary Best Management Practices outlined in the California Stormwater Quality Association's Construction Handbook (CASQA, 2003). PG&E's Storm Water Pollution Prevention Plan and erosion control Best Management Practices will be used to minimize any wind- or water-related erosion. Protective measures will include:	a. No discharge of pollutants from vehicle and equipment cleaning will be allowed into storm drains, wetlands, or water courses.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	b. Vehicle and equipment fueling and maintenance operations must be at least 100 feet from vernal pools and other aquatic habitat.						
	c. Dust control will be implemented, including the use of water trucks to control dust in disturbed areas, rocking temporary access road entrances and exits, and placement of geotextile mats and rock on access road areas to be used in the wet season.						
	d. Disturbed work areas will be restored to pre-Project conditions and will be reseeded, as appropriate.						

TABLE 2
Gas Line 210A and 210B ILI Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
	APM-BIO-5: Project-related vehicles shall observe a 15 mph speed limit in all Project areas, except on county roads and state and federal highways.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	APM-BIO-6: The limits of the construction area throughout the Project will be flagged if not already marked by right of way or other fencing, and all activity will be confined within the marked area. A qualified biologist shall be onsite during all activities that could result in the take of a listed species.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	APM-BIO-7: The Project proponent shall include a copy of the USFWS-issued Biological Opinion (BO) within its construction documents making the primary contractor responsible for implementing all requirements and obligations included within the BO, and to educate and inform all other contractors involved in the project as to the requirements of the BO.	Prior to construction		Prior to construction		PG&E	PG&E, reporting to SWRCB
	APM-BIO-8: A biologist shall inspect construction-related activities at the proposed Project area to ensure that no unauthorized take of federally-listed species or destruction of their habitat occurs. The biologist shall be available for monitoring throughout all phases of construction that may result in adverse effects to listed crustaceans.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	APM-BIO-9: The contractor will prepare a site-specific Stormwater Pollution Prevention Plan (SWPPP) for the Project to protect receiving waters from pollution. The SWPPP will include standard sediment and erosion control measures	During Construction		During Construction		PG&E	PG&E, reporting to SWRCB

TABLE 2
Gas Line 210A and 210B ILI Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
	that include limiting soil disturbances during the winter rainfall season. Given the site-specific conditions of the Project area, the SWPPP for this Project will generally include limiting soil disturbances during the winter rainfall season of October 15 through April 15 and fully stabilizing disturbed areas prior to December 1. Standard sediment erosion control measures, such as silt fencing, straw bale barriers, and sediment traps shall be implemented to directly reduce the off-site transport of sediment from disturbed slopes. Existing vegetation that can be preserved will be identified and flagged or fenced to avoid disturbance. Erosion in disturbed areas will be controlled through the use of grading operations that eliminate direct routes for conveying runoff to drainage channels and use of soil stabilization Best Management Practices (BMPs), such as mulching, erosion control fabrics, and/or reseeded with grass or other plants where necessary.						
	APM-BIO-10: To the extent feasible, all ground disturbing activities within MP 1.38 and MP 4.88 work sites will be conducted during the dry season (June 1 – October 15). Prior to the initiation of ground disturbance at these two work sites, preconstruction surveys shall be conducted by a qualified biologist(s) for burrows and upland habitat within the temporary work easements. These surveys shall consist of walking surveys of the project site and adjacent areas to determine presence of burrows. Burrows will be flagged and avoided to the extent feasible. If salamanders are observed during these surveys, a USFWS-approved	Prior to construction (i.e., ground disturbance)		Prior to construction (i.e., ground disturbance)		PG&E	PG&E, reporting to SWRCB

TABLE 2
Gas Line 210A and 210B LIJ Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
	biologist(s) will remove the animal from the work site and translocate them under the direction and authorization of the Service.						
	APM-BIO-11: All salamanders captured on the Project site during monitoring and inspections conducted during construction shall be removed by a USFWS-approved biologist(s) and translocated under the direction and authorization of the USFWS.	During Construction		During Construction		PG&E	PG&E, reporting to SWRCB
	APM-BIO-12: To prevent inadvertent entrapment of salamanders during construction, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. If at any time a trapped listed animal is discovered, a biologist(s) should immediately place escape ramps or other appropriate structures to allow the animal to escape, or the USFWS and/or CDFG shall be contacted by telephone for guidance. The USFWS shall be notified of the incident by telephone and electronic mail within one (1) working day.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	APM-BIO-13: If requested, before, during, or upon completion of ground breaking and/or construction activities, the Project proponents shall allow access by USFWS and/or CDFG personnel to the Project site to inspect Project effects to the salamander and associated habitats.		Before or throughout the construction period		Before or throughout the construction period	PG&E	PG&E, reporting to SWRCB

TABLE 2
Gas Line 210A and 210B ILL Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
APM-BIO-14: Prior to construction activities, a qualified botanist shall establish exclusion zones for special status plants within 50 feet of impact areas. These exclusion zones will include known populations and, where practicable, a 50-foot buffer zone. Construction equipment and personnel will be restricted from entering the exclusion zones, except where allowed under specific mitigation measures. An environmental monitor will be onsite during construction activities in the vicinity of sensitive biological resources. If direct or indirect impacts to special-status plant species are observed then the monitor shall notify the construction manager immediately. If any populations of special-status plants are impacted, work in that area will be halted. The environmental monitor, in consultation with PG&E, will contact the CDFG and/or the USFWS.		Prior to construction (i.e., ground disturbance)	Ongoing	Prior to construction (i.e., ground disturbance)	Ongoing	PG&E	PG&E, reporting to SWRCB
		Prior to construction (i.e., ground disturbance) at this location		Prior to construction (i.e., ground disturbance) at this location		PG&E	PG&E, reporting to SWRCB
APM-BIO-15: Pappose tarplant readily transplants from seed and can adapt and survive in disturbed habitats along with natural ones. This species also appears to thrive with some disturbances, such as trampling, grazing, mowing, and light disking. Prior to disturbing areas with pappose tarplant, all top soil shall be removed. Plants that are in bloom shall be removed and dried to collect seeds that have matured. After construction, restoration and planting with top soil and seed shall be implemented by a qualified botanist. PG&E is currently seeking a suitable transfer site and will submit the proposed translocation site and pappose tarplant Relocation Plan for CDFG approval.		Prior to construction (i.e., ground disturbance) at this location		Prior to construction (i.e., ground disturbance) at this location		PG&E	PG&E, reporting to SWRCB

TABLE 2
Gas Line 210A and 210B ILLI Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
	APM-BIO-16: For Project construction activities occurring during the bird nesting season of February 1 through August 31, a qualified ornithologist shall conduct pre-construction surveys for nesting birds within two weeks of construction. These surveys will cover the transmission line route, staging areas, pull sites, fly sites, and access routes. Additional pre-construction surveys shall be conducted for each new phase of Project implementation that occurs during the nesting season, no more than two weeks prior to construction. For any nests that are found, nest protection zones will be established. For passerine birds, a 50 to 100-foot protection zone shall be established around active nests; for raptors, a 300-foot protection zone and for golden eagles a 500-foot protection zone shall be established around active nests. These protection zones may be modified on a site-specific basis as determined by the Environmental Monitor or in coordination with CDFG. Active nests within the Project area would be monitored for signs of disturbance. If the biological monitor determines that a disturbance is occurring, construction shall be halted, and the agencies shall be contacted as to the measures that shall be implemented. Preconstruction surveys will be conducted by a qualified biologist for burrowing owls at work sites MP 1.38 and MP 4.88. If active burrows are found near a work area during preconstruction surveys or at any time during construction, work in the vicinity of the burrows would be limited as follows: no disturbance would occur within approximately	2-weeks prior to start of each phase of project construction (i.e., ground disturbance) during nesting season			To coincide with the implementation of APM-21 pre-construction surveys as appropriate; and ongoing construction if active nests are identified	PG&E	PG&E, reporting to SWRCB

TABLE 2
Gas Line 210A and 210B ILL Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
	160 feet of occupied burrows during the non-breeding season of September 1 – January 31, or within approximately 250 feet during the breeding season of February 1 – August 31; the limits of the exclusion zone in the project work area will be clearly marked with signs, flagging and/or fencing.						
	PG&E will consult with CDFG to determine the appropriate mitigation requirements if impacts to burrowing owl habitat cannot be avoided.						
	APM-BIO-17: To the extent feasible, buffers to wetlands will be created using signage or exclusion fencing during construction. Areas that are avoided shall be further protected from indirect impacts by using BMPs. PG&E shall implement the following erosion and sediment control and surface water protection methods for each of the work sites: At MP 1.38, the portion of seasonal wetland to be filled will be clearly delineated and marked with flagging or fencing so that the remaining portion of the seasonal wetland will be avoided. BMPs, such as silt fencing and/or fiber rolls, will be installed around the portion of seasonal wetland to be avoided. At MP 4.88, BMPs, such as fiber rolls and/or silt fencing, shall be installed between the two seasonal wetlands and the work site. A qualified biological monitor shall inspect construction-related activities at each work site	Prior to construction (i.e., ground disturbance)		Prior to construction (i.e., ground disturbance)	During construction	PG&E	PG&E, reporting to SWRCB

TABLE 2
Gas Line 210A and 210B ILLI Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
	to assist in the preservation of existing vegetation to the extent possible, ensure avoidance of water features when feasible, and to ensure water quality measures and BMPs are being implemented.						
Cultural Resources							
Possible impacts to previously unidentified archaeological resources that could be encountered during Project-related ground-disturbing activities	APM-CULT-T-1: If concentrations of prehistoric or historic-period materials are encountered during ground-disturbing work at any of the Project work sites, all work in the immediate vicinity of the discovery shall be halted until a qualified archaeologist can evaluate the significance of the find. If the find is determined to be significant, PG&E shall determine the appropriate avoidance measures or other appropriate mitigation in consultation with a qualified archaeologist and the State Water Resources Control Board. Significant cultural materials shall be curated according to current professional standards.		During construction		During construction	PG&E	PG&E, reporting to SWRCB
Possible impacts to previously unidentified paleontological resources that could be encountered during Project-related ground-disturbing activities	APM-CULT-T-2: If unanticipated paleontological resources are discovered during ground-disturbing activities during the Project, excavations in the immediate vicinity of the find shall be temporarily halted until the discovery is examined by a qualified paleontologist per Society of Vertebrate Paleontology standards. If the find is determined to be significant, PG&E shall determine the appropriate avoidance measures or other appropriate mitigation in consultation with a qualified paleontologist and the State Water Resources Control Board.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB

TABLE 2
Gas Line 210A and 210B ILI Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
Potential impacts related to the unanticipated discovery of human remains	Significant paleontological finds shall be curated according to current professional standards.						
	APM-CULT-3: If human remains are encountered, work in the immediate vicinity shall stop and the County Coroner shall be notified immediately. A qualified archaeologist shall be contacted immediately to evaluate the discovery. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission then has 48 hours to identify a Most Likely Descendent.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
Hydrology and Water Quality							
Potential impacts related to ground-disturbing activities that could cause soil erosion and release of excess sediment into water courses	APM-WQ-1: No discharge of pollutants from vehicle and equipment cleaning are allowed into the storm drain or water courses.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	APM-WQ-2: Vehicle and equipment fueling and maintenance operations must be at least 50 ft away from vernal pools and other aquatic habitat.		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB
	APM-WQ-3: Dust control will be implemented, including the use of water trucks to control dust in disturbed areas; rocking temporary access road entrances and exits; and placement of geotextile mats and rock on access road areas		During Construction		During Construction	PG&E	PG&E, reporting to SWRCB

TABLE 2
Gas Line 210A and 210B ILI Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring
	to be used in the wet season.						
	APM-WQ-4: Disturbed work areas will be restored to pre-Project conditions, and reseeded if appropriate.	Restoration at the conclusion of construction		During Restoration		PG&E	PG&E, reporting to SWRCB
	APM-WQ-5: At the time of excavation within the temporarily impacted wetland at MP 1.38, the top six to twelve inches of soil within the wetland footprint will be salvaged and set aside. Once the upgrade and repair work is complete, the wetland topsoil will be reapplied to the excavation in the same soil horizon and compacted to pre-existing conditions. A qualified wetlands scientist will be present during excavation and backfill of soils at the MP 1.38 site.	During Construction		During Construction		PG&E	PG&E, reporting to SWRCB

Noise

Potential temporary construction related noise impacts to sensitive receptors	APM-NOI-1: Care of Equipment – Equipment engines shall be covered, and PG&E will ensure that mufflers are in good working condition. This measure can reduce equipment noise by 5 to 10 dBA.	During Construction		During Construction		PG&E	PG&E, reporting to SWRCB
	APM-NOI-2: Equipment Location – All stationary equipment such as compressors and welding machines shall be located away from noise receptors to the extent practicable.	During Construction		During Construction		PG&E	PG&E, reporting to SWRCB

Notes:

¹ PG&E avoidance and protection measures are included as part of the project description.

TABLE 2
Gas Line 210A and 210B ILLI Repair Project MMRP Summary

Issue Area/Impact	Measure	Implementation Duration		Monitoring Duration		Responsibility ²	
		One-time	Ongoing	One-time	Ongoing	Implementation	Monitoring

² PG&E will delegate responsibility to authorized representative.