Initial Study/Mitigated Negative Declaration for the Pacific Gas and Electric Company Vegetation Removal Project, Half Moon Bay, San Mateo County, California

MAY 2020

PREPARED FOR

City of Half Moon Bay

PREPARED BY

SWCA Environmental Consultants

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE PACIFIC GAS AND ELECTRIC COMPANY VEGETATION REMOVAL PROJECT, HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

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SWCA Project No. 53738

May 2020

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ACRONYMS AND ABBREVIATIONS

A-1	Exclusive Floriculture Zoning District
BAAQMD	Bay Area Air Quality Management District
BAHCP	Bay Area Habitat Conservation Plan
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCC	Central California Coast
CCR	California Code of Regulations
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
CFPD	Coastside Fire Protection District
CFR	Code of Federal Regulations
City	City of Half Moon Bay
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	County of San Mateo
CRLF	California red-legged frog
DPS	Distinct Population Segment
DTSC	California Department of Toxic Substance Control
EA	environmental assessment
EPA	U.S. Environmental Protection Agency
ESHA	environmentally sensitive habitat area
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
IND	Industrial
IPaC	Information for Planning and Consultation
IS/MND	Initial Study/Mitigated Negative Declaration
ITP	Incidental Take Permit
km	kilometer
LCLUP	Local Coastal Land Use Plan
LOS	level of service
MM	Mitigation Measure
MRZ	Mineral Resource Zone
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NOAA Fisheries	National Oceanic and Atmospheric Administration National Marine Fisheries Service
PG&E	Pacific Gas and Electric Company
PRC	Public Resources Code
project	Vegetation Removal Project

POST	Peninsula Open Space Trust
ROW	PG&E pipeline right-of-way
SFBAAB	San Francisco Bay Area Air Basin
SFGS	San Francisco garter snake
SR-	State Route
SSC	California Special Species of Concern
SVP	Society of Vertebrate Paleontology
U-R	Urban Reserve
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
WPT	western pond turtle

1 INTRODUCTION

Pacific Gas and Electric Company (PG&E) is seeking a Coastal Development Permit (CDP) in support of the Vegetation Removal Project (project). The project involves vegetation maintenance (e.g., removing trees and brush) within PG&E's existing rights-of-way (ROW) that contain a high-pressure natural gas transmission pipeline. The purpose of the project is to protect the structural integrity of the existing natural gas pipeline, which could be damaged by the roots of trees and woody brush. Additionally, the project is necessary to improve emergency access and allow for routine leak surveys, which are also necessary to maintain natural gas pipeline integrity.

1.1 Project Location

The project is located within the California Coastal Zone in the city of Half Moon Bay (City), San Mateo County, California. The project is divided into two distinct sites: Southwest Work Area and Northeast Work Area. The Southwest Work Area is located on the south side of State Route (SR-) 92, from the Hilltop Mobile Home Park to approximately 1,000 feet east (Assessor Parcel Numbers (APNs): 056-260-180 and 056-260-190). The Northeast Work Area is located on the south side of SR-92, including approximately 1,400 feet between the Spanish Town shops and east toward R Road (APNs:056-270-050 and 056-260-080). Figure 1, Project Location, depicts the location of the project.

1.2 Environmental Setting

The pipeline traverses land zoned as Urban Reserve (U-R), Industrial (IND), and Exclusive Floriculture (A-1).[1] Existing land uses at the project site include a private utility easement, a residence, and commercial uses. Much of the project site consists of undeveloped land that runs parallel to SR-92. The Southwest Work Area, RW-V-2298-15, includes a row of evenly spaced Monterey cypress (*Cupressus macrocarpa)* trees that were planted along the southern side of a paved pedestrian path and two Monterey pines (*Pinus radiata)* that are in failing health. The trees are located on two parcels. The City owns one of the parcels and leases the larger parcel, from the Peninsula Open Space Trust (POST), which is the location of the City maintenance yard. The property was previously farmed and home to a landscaping business and is now primarily composed of annual grasses.

An agricultural pond (cattail [*Typha* sp.] marsh/pond in Figure 12a, of Appendix A) is located at the northwest corner of the POST property and approximately 25 feet south of the Southwest Work Area, and is identified as a California red-legged frog (CRLF; *Rana draytonii*) breeding site and environmentally sensitive habitat area (ESHA) in the public draft of the Local Coastal Land Use Plan (LCLUP) update (see Figure 2).[2,3] The area surrounding the cattail/marsh pond is classified as *Potential ESHA and Potential San Francisco Garter Snake Habitat (SFGS; Thamnophis sirtalis tetrataenia) and/or CRLF Upland, Foraging and Dispersal Habitat (*see Figure 2).[4] The Northeast Work Area, RW-V-2196-15, is heavily wooded, primarily with eucalyptus trees, and portions of the project area are within close proximity to the Pilarcitos Creek riparian corridor.

[1] City of Half Moon Bay. 2016. Zoning Map. Available at: https://www.half-moon-bay.ca.us/DocumentCenter/View/129/Zoning-Map-PDF. Accessed June 5, 2019.

[2] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

[3] Although the LCLUP is still in draft form and has not been formally adopted, the natural resource maps and sensitive species information is based on the best available science and is not subject to change during future revisions of the draft LCLUP.

[4] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

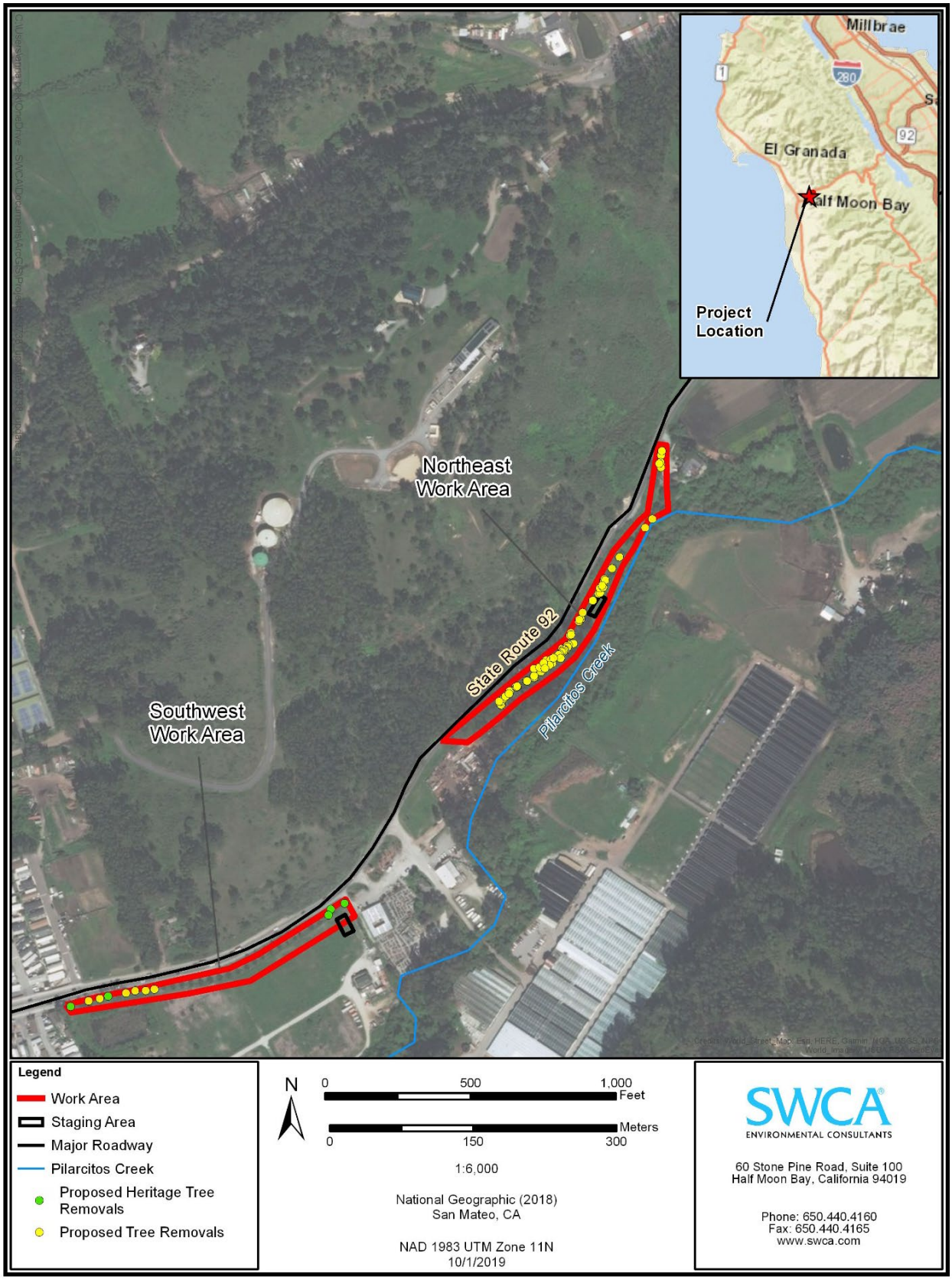

Figure 1. Project Location

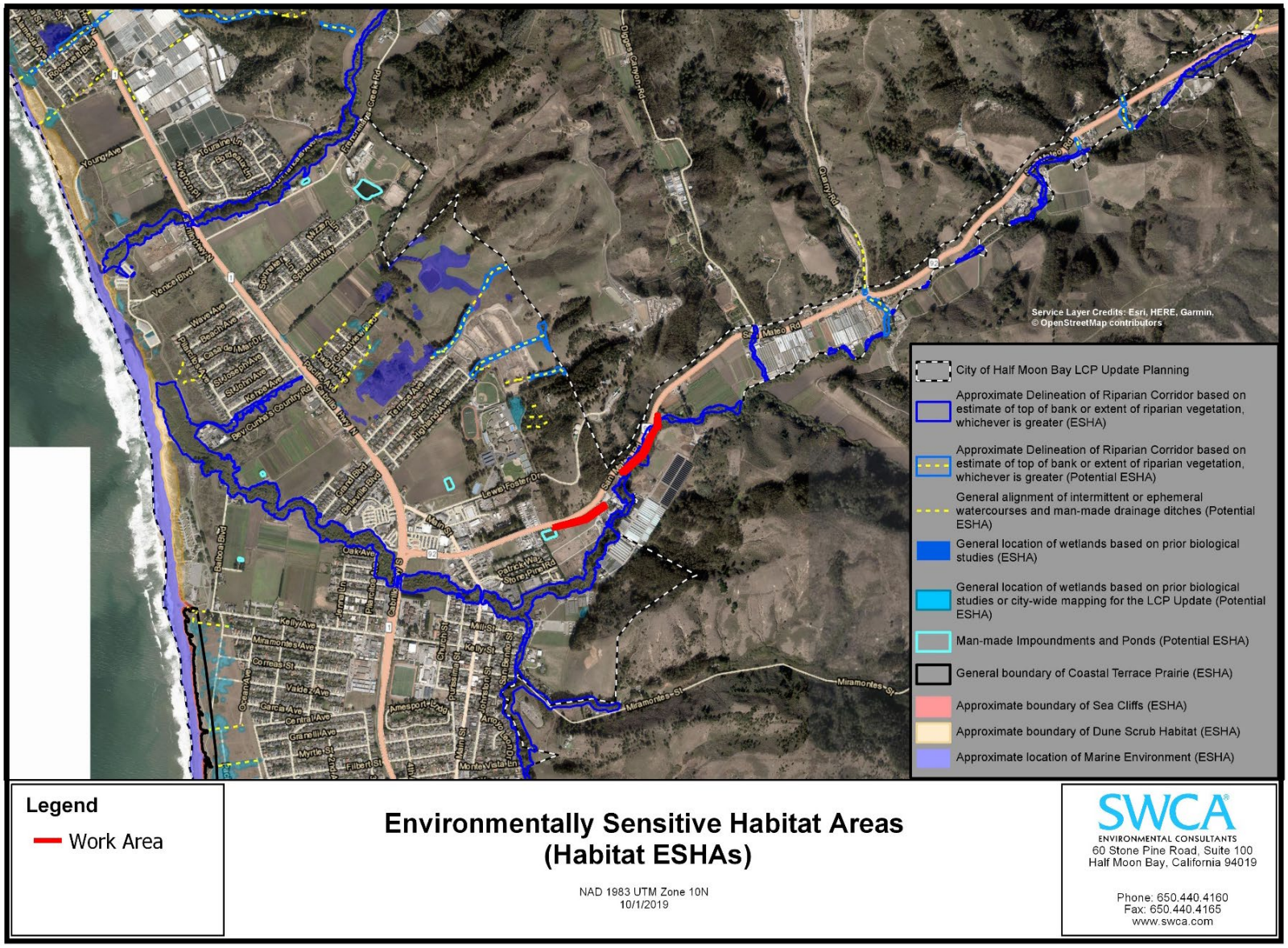

Figure 2. Environmentally Sensitive Habitat Areas

Portions of the Northeast Work Area falls within designated *ESHA and CRLF Upland, Foraging, and Dispersal Habitat and SFGS Habitat* (see Figure 2).[5] The ESHA status is based on information found in the *Half Moon Bay Community Park Master Plan,*[6] prepared in 2006, for a proposed park that was never developed and a follow-up reconnaissance level survey performed in July 2018.[7]

1.3 Project Description

PG&E proposes to remove 68 trees and 100 brush units[8] from the Northeast Work Area and 11 trees and 15 brush units from the Southwest Work Area. The purpose of the project is to protect the integrity of the existing pipeline, by managing vegetation in compliance with 49 Code of Federal Regulations (CFR) 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards; California Public Utilities Commission General Order 112-E, State of California Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission, and Distribution Piping Systems; and PG&E's Utility Standard TD-4490S, Gas Pipeline Rights-of-Way Management. The roots of trees and woody brush can damage pipelines. Tree and brush removal would be limited to specific vegetation that has been determined to pose a hazard to pipeline integrity due to close proximity, species, and size. Tree removal would be limited to within 14 feet from the edge of the pipeline and brush within 5 feet. All trees proposed for removal have been mapped and marked in the field (see Figure 1). In addition, management of vegetation within PG&E's ROW would help minimize response times in case of a gas leak or other required maintenance needs.

Vegetation maintenance activities are anticipated to require up to 3 weeks. Project activities would typically be conducted during daylight hours Monday through Friday between 8 a.m. and 5 p.m. Project activities would generally be confined to the existing ROW and staging areas. Two occurrences of night work may be required to facilitate the removal of a limited number of trees that would require crews to utilize the eastbound lane of SR-92. To accommodate project activities during these instances, traffic lanes may be temporarily shifted along the portion of SR-92 adjacent to the project site or a temporary lane closure may be necessary if there is insufficient room to shift traffic lanes. Work within the roadway would be subject to approval by the California Department of Transportation (Caltrans) in consultation with other public safety agencies.

The selective removal of vegetation is not expected to result in the creation of substantial amounts of bare ground surfaces. Tree stumps and roots would be left in place. Vegetation would be cut to no more than 6 inches above ground level. All vegetation would be removed by crews using hand tools, including chainsaws, loppers, shovels, rakes, and weed whackers, with support from a mini excavator and/or rubber-tracked skid steer and a truck-pulled chipper. No new roads or grading is proposed, and vehicles would be limited to existing roads and disturbed areas. A bucket truck would occupy the eastbound lane of SR-92 during the two potential occurrences of night work. Vegetation would be chipped within the ROW or designated staging areas and broadcast along the ROW. One landowner, POST, requested that vegetation cleared from their property be hauled off-site to a licensed green waste recycling facility. The City is under contract to purchase this property and will determine the best approach if the title has

[5] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

[6] The *Half Moon Bay Community Park Master Plan* was a study prepared for the City for a proposed park adjacent to the project site. The master Plan was not formally adopted because the legal title of the property associated with the proposed park was never transferred to the City and the park was not developed. Nonetheless, the masterplan contains biological resource findings relevant to the project and is, therefore, referenced throughout this document.

[7] A reconnaissance level survey for California red-legged frog was conducted on July 2, 2018, of the cattail/marsh pond.

[8] A brush unit represents approximately 540 square feet of brush.

changed hands before work commences. Current best practices would also require that the diseased Monterey pines be disposed of at a licensed green waste facility.

Project crews would access the project site off SR-92. From SR-92, the Northeast Work Area would be accessed through a reclaimed wood business, Firewood Farms, to the south and from an unnamed private dirt roadway to the north. The Southwest Work Area would be accessed by existing paved and gravel roadways through the Spanish Town shops to the north and an existing gravel driveway to the south. If necessary, an alternative access route to the Southwest Work Area could include Stone Pine Road to the west. As depicted in Figure 1, Project Location, equipment and worker vehicles would be staged in designated staging areas. All staging areas would be located in previously disturbed areas and set back as far as possible from the ESHA to avoid potential impacts to the greatest extent feasible. The staging areas would be used for worker vehicle parking and equipment staging. It is estimated that each staging area could require an area of up to 50 by 50 feet. No removed vegetation would be stored within the staging areas, except as temporarily needed to process by chippers or to be loaded onto trucks for off-site transportation.

PG&E is proposing to apply herbicides to the cut stumps within the ROW to suppress the rate of vegetation regrowth that could create a safety risk. The focus would be to deter new saplings from sprouting within cleared areas. Herbicides would not be broadcast sprayed and would not be discharged to sensitive habitat areas, coastal waters, or wetlands. Alternatively, if herbicides are not allowed, by the City or other agencies, within an ESHA or ESHA buffer area where herbicides would affect an ESHA, vegetation would be trimmed by crews using hand tools, including chainsaws, loppers, shovels, rakes, and weed whackers. A truck-pulled chipper may be required depending on the amount of vegetation regrowth. If a chipper is required, vegetation would be chipped within the ROW or designated staging areas and broadcast along the ROW or hauled off to a licensed green waste recycling facility.

PG&E is proposing to replace all removed trees exceeding 12 inches in diameter on a one for one basis. This exceeds City replacement requirements for heritage tree removal, which exclude eucalyptus trees. The City would determine the locations for replanting. In some cases, replanting on site may not be feasible or beneficial and replacement trees would be planted off-site.

1.4 Required Discretionary Approvals

A Coastal Development Permit (CDP) would be required for the project. The City is the designated agency responsible for CDP approval of projects within the City limits.

PG&E has complied with the requirements of the National Environmental Policy Act (NEPA), as administered by the USFWS. The USFWS prepared an Environmental Assessment (EA), issued a Finding of No Significant Impact, approved the PG&E Bay Area Operations and Maintenance Habitat Conservation Plan (BAHCP), and issued an Incidental Take Permit (ITP) in 2018. The area covered under the USFWS review and permits is a regional, nine county area that includes the County of San Mateo (County).

1.5 Intended Uses of this Document

This Initial Study/Mitigated Negative Declaration (IS/MND) provides environmental information and analysis in compliance with the California Environmental Quality Act (CEQA), which is necessary for City decision makers to be able to adequately consider the effects of the project. The City, as the lead agency, has approval authority and responsibility for considering the environmental effects of the project as a whole. To reduce duplication of effort, local agencies are generally encouraged to use NEPA

documents, rather than preparing a separate CEQA document, if the NEPA process would be completed sooner than the CEQA process (CEQA Guidelines Section 15221). However, the NEPA review process must meet specific requirements to be used in lieu of the CEQA document. The City is preparing this CEQA document after determining that, because of the broad regional scope of the NEPA review and new information concerning protected species, local project-specific impacts had not been adequately evaluated, and local noticing and community involvement requirements had not been fulfilled as required by CEQA Guidelines Sections 15221 and 15225. Consequently, the EA did not qualify as a substitute for CEQA evaluation. This CEQA document does, however, incorporate all applicable mitigation and avoidance measures from the EA, BAHCP, and ITP. In some cases, the requirements have been strengthened to meet local requirements.

2 ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The proposed project could have a "Potentially Significant Impact" for environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Public Services
☐ Agriculture and Forestry Resources	☒ Hazards and Hazardous Materials	☐ Recreation
☒ Air Quality	☒ Hydrology and Water Quality	☒ Transportation
☒ Biological Resources	☐ Land Use and Planning	☐ Tribal Cultural Resources
☐ Cultural Resources	☐ Mineral Resources	☐ Utilities and Service Systems
☐ Energy	☐ Noise	☒ Wildfire
☐ Geology and Soils	☐ Population and Housing	☐ Mandatory Findings of Significance

ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: _____ **Signed:** _____

I. Aesthetics

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
(a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
(b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
(c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Environmental Evaluation

Except as provided in Public Resources Code (PRC) Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

The City LCLUP designates coastal views and the hillsides to the east as scenic resources. Motorists traveling along SR-92 within the project vicinity are exposed to views of commercial facilities, areas of dense forest consisting largely of blue gum eucalyptus (*Eucalyptus globulus*), coastal scrub, and residences. The coastline is approximately 1.25 miles from the westernmost extent of the project. Views of coastal areas are limited along SR-92 within the project vicinity due to the distance, surrounding topographic variation, and the winding nature of the highway.

Vegetation removal activities would temporarily introduce equipment and personnel into the existing views. These activities would generally be limited to the existing ROW southeast of the roadway. Equipment and personnel would not obstruct views of the coastline. Additionally, vegetation removal activities would be temporary, lasting approximately 3 weeks. The removal of the vegetation and trees visible from SR-92 would be detectable, as shown in the before and after photographs (Photographs 1a and 1b through 3a and 3b). However, the 79 trees slated for removal represent a small fraction of the large swaths of wooded areas along SR-92 and within the project area. As described in Appendix A, there are approximately 735 acres of eucalyptus habitat within 2 miles of the project.

The trees within the Southwest Work Area consist primarily of ornamental plantings of Monterey cypress and two Monterey pines. The pines are in poor health. The cypress trees were planted in a uniform row of evenly spaced trees between the paved pedestrian path that runs parallel to SR-92 and the POST/City maintenance yard property to the south. Additionally, there is also a second row of trees, approximately 200 feet long, between the path and SR-92. These trees are northwest of the City maintenance yard and provide additional screening of the City facilities. As depicted in Figure 1, most of the trees in the Southwest Work Area would remain.

Photograph 1a. Existing Conditions, Looking Southwest

Photograph 1b. Future Conditions with Tree Removals, Looking Southwest

Photograph 2a. Existing Conditions, Looking East

Photograph 2c. Future Conditions with Tree Removals, Looking East

Photograph 3a. Existing Conditions, Looking East

Photograph 3b. Future Conditions with Tree Removals, Looking East

The trees proposed for removal are clustered in two distinct groups located at the far east and west ends of the Southwest Work Area. Eight trees are located at the western end and three trees are located at the eastern end. As viewed looking south from SR-92, the backdrop for the westernmost trees is undeveloped hillside and vegetation associated with the cattail/marsh pond. As viewed looking south from SR-92, the backdrop for the easternmost trees is the Spanish Town shops, outdoor sculptures to the east, an open annual grassland field, and existing maintenance facilities on the POST property.

There are 43 trees located within the Southwest Work Area. Removing the eight trees at the western end of the Southwest Work Area would potentially disrupt the rhythm of the landscaping and provide additional views of the hillside and vegetation associated with the cattail marsh/pond. However, scenic changes would not be substantially pronounced or adverse, as the viewshed (as seen from SR-92) would offer views of the undeveloped hillsides and vegetation associated with the cattail/marsh pond. Further, not all trees would be removed at the western end of the Southwest Work Area (as depicted in Figure 1) and, therefore, the trees not subject to removal would continue to provide visual screening benefits.

Removing the three trees at the eastern end of the Southwest Work Area would result in more pronounced views of the maintenance yard facilities, as viewed from SR-92. However, the maintenance yard facilities occupy old agricultural buildings. Consequently, any view changes would be consistent with the rural, agricultural character of the area. Further, not all trees would be removed at the eastern end of the Southwest Work Area (as depicted in Figure 1) and, therefore, the trees not subject to removal would continue to screen portions of the maintenance yard.

A large portion of the Northeast Work Area consists of dense forest consisting primarily of blue gum eucalyptus and Himalayan blackberry scrub. The northernmost portion of the Northeast Work Area contains a small area of ornamental trees. The view from the Northeast Work Area looking south from SR-92 includes dense woodland, which largely obstructs the backdrop south of the woodland. The backdrop generally consists of agricultural land uses and undeveloped hillside. Sixty-seven trees would be removed from the Northeast Work Area. However, due to the density of the trees within the work area, the removal of 67 trees would not create substantial view changes or openings within the wooded area. The trees not subject to removal would continue to provide visual screening benefits and obstruct the backdrop from motorists along SR-92.

Because of the limited number of trees that would be removed, the continued visual screening that would be provided by the trees not subject to removal, and the rural/agricultural visual character of the area, the project would not have a substantial adverse effect on a scenic vista, and impacts would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The project is located adjacent to SR-92, which is classified as an Eligible State Scenic Highway, but has not been designated as a Scenic Highway.[9] No rock outcroppings or historic buildings are located within the project work areas or would be damaged as a result of the project. The Spanish Town single family dwelling (located at 525 San Mateo Road), was constructed in 1905 and is included in the City's Historic Resource Inventory. Less is known about the other buildings, but they may also be of historic value. The buildings are approximately 100 feet south of the ROW associated with the Southwest Work Area and would not be affected by the project. The project would result in the removal of 79 trees, a subset of which would be detectable to motorists along SR-92, as shown in the before and after photographs

[9] Caltrans. 2015. California Scenic Highway Mapping System, San Mateo County. Available at: https://web.archive.org/web/20190326032416/http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed July 17, 2019.

(Photographs 1a and 1b through 3a and 3b). However, the 79 trees slated for removal represent a small fraction of the large swaths of wooded areas along SR-92 and within the project area. As described in Appendix A, there are approximately 735 acres of eucalyptus habitat within 2 miles of the project.

As previously discussed above in response to CEQA question a, most trees within the heavily wooded area immediately southeast and adjacent to the roadway along the Northeast Work Area would not be removed. Therefore, these trees would act as a visual screen, obscuring the removed trees from motorists. In the Southwest Work Area, the effect of removing 11 of the 42 evenly spaced trees would minimally alter the landscape. Any changed views would be consistent with the rural, agricultural character of the region.

Because of the limited number of trees that would be removed, the vegetation screening provided by existing trees, and the overall existing landscape character, removal of 79 trees would not substantially damage scenic resources within a state scenic highway; therefore, impacts would be less than significant.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The project is not located within an urbanized area, as defined in Section 21071 of the CEQA Guidelines. The project does not include grading, structural development, or any other design element that would result in substantial visual contrast against the existing landscape, dominate the viewshed when compared to other surrounding objects, or obstruct views of existing landscape features. Although 79 trees would be removed, these trees represent a small fraction of the large swaths of wooded areas along SR-92 and within the project area. As discussed in CEQA questions a and b above, the change in the visual characteristics of the area would be minimal. Because the project would not result in a substantial visual contrast, dominate the viewshed, or obstruct views, the project would not significantly alter or degrade the visual character or quality of public views. Therefore, impacts would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Due to the steep terrain within portions of the project, vegetation removal activities may require two occurrences of work from the eastbound lane of SR-92. To reduce traffic disruption, it is proposed that this work be performed during off-peak evening hours. Artificial lighting would be required during this nighttime work. However, this temporary occurrence of nightwork would not represent a substantial new permanent source of light, and impacts would be less than significant.

Other than the potential two occurrence of night work, the work would be performed during daytime hours. Vegetation removal activities would be conducted using gas-powered hand tools (e.g., weed whackers and chainsaws). The potential for this equipment to generate substantial glare to motorists would be negligible. As a result, the project would not create a new source of glare, and impacts would be less than significant.

II. Agriculture and Forestry Resources

Environmental Issues		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
(a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
(b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
(c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
(d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
(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?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The project is not located on lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Although not currently being farmed, some of the land adjacent to the Southwest Work Area could support agriculture, and the U-R zoning allows agricultural uses. The project consists of removing a limited number of trees and brush, located near an existing natural gas pipeline. This activity would not result in the conversion of existing farmlands to other uses. Therefore, the project would not convert mapped farmland to a non-agricultural use, and no impact would occur. [10]

[10] California Department of Conservation. 2016. California Important Farmland Finder. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed June 5, 2019.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The project site is zoned U-R, IND, and A-1 and is not subject to a Williamson Act contract.[11] Therefore, the project would not conflict with existing zoning or Williamson Act contracted lands, and no impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

The project site is zoned U-R, IND, and A-1 and would not result in the rezoning of forest land, timberland, or timberland zoned Timberland Production. Therefore, the project would not conflict with existing zoning or cause rezoning of forest land, timberland, or timberland zoned Timberland Production, and no impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

The Northwest Work Area is located within a heavily wooded area composed largely of eucalyptus trees, a non-native invasive species. The selective removal of a small percentage of the trees along the existing ROW would not substantially alter the woodland character of this area. The project would not result in conversion of forest land to non-forest use.

Removal of select vegetation, within 14 feet of the edge of the natural gas pipeline is required to protect the natural gas pipeline's structural integrity and to improve emergency access and allow for routine leak surveys. The vegetation proposed for removal consists primarily of non-native species and trees planted as ornamental highway landscaping. The project site is not primarily managed as a forest resource. As a result, the project site does not meet the definition of forest land, as stated in PRC Section 12220(g). Therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

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?

The project is limited to removal and management of vegetation along an existing natural gas pipeline within the existing ROW and designated staging areas. This action would not result in a loss of agricultural land and would not interfere with existing agricultural uses in the area. In addition, the project site does not support forest land as defined in PRC Section 12220(g); therefore, the project would not result in the conversion of forest land to a non-forest use. No new structures, grading, or surfacing is proposed. The project would not result in the conversion of Farmland or forest land, and no impact would occur.

[11] City of Half Moon Bay 2016.

III. Air Quality

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
(a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
(b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
(c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
(d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

Environmental Evaluation

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

The project is located within the San Francisco Bay Area Air Basin (SFBAAB) under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The BAAQMD regulates air pollutant emissions, enforces regulations, administers permits governing stationary sources, inspects stationary sources, monitors air quality and meteorological conditions, and assists local governments in addressing climate change. The BAAQMD adopted the Final 2017 Clean Air Plan in April 2017.[12] The plan updated the 2010 Clean Air Plan and includes strategies to reduce emissions of ozone precursors and emissions of fine particulate matter. The plan also provides a framework for long-term planning efforts to reduce greenhouse gas (GHG) emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.[12]

The 2017 Clean Air Plan contains various control measures to reduce stationary and mobile sources of air pollutants. The project would not include new stationary sources of air pollutants, increase population growth, or result in long-term operational emissions. The project would, however, generate temporary emissions from the use of equipment such as chainsaws, woodchippers, and trucks, as well as worker vehicle trips. The Clean Air Plan does not specifically address this type of project. However, the U.S. Environmental Protection Agency (EPA) and CARB have established standards for off-road equipment, which is a broad category that includes small nonroad spark-ignition engines, marine spark-ignition engines, and equipment used for construction.[13] These standards apply to handheld tools such as

[12] Bay Area Air Quality Management District (BAAQMD). 2017. *Clean Air Plan*. Available at: http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed March 16, 2019.

[13] Environmental Protection Agency. 2018. EPA Emission Standards for Nonroad Engines and Vehicles. Available at: https://www.epa.gov/emission-standards-reference-guide/epa-emission-standards-nonroad-engines-and-vehicles. Accessed May 18, 2020.

chainsaws and weed whackers, as well as larger equipment such as woodchippers.[14] PG&E is required to ensure that all off-road vehicles and equipment comply with control number TR22 of the 2017 Clean Air Plan, which requires all off-road engines to comply with Tier 3 or Tier 4 standards.[15] The use of this equipment must comply with the emission standards set forth in Part 1054, Title 40, Code of Federal Regulations for small handheld engines. With compliance with the emission standards established by EPA and CARB, the project would not conflict with or obstruct the implementation of the 2017 Clean Air Plan; therefore, impacts would be less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The EPA has identified air pollutants that endanger public health and the environment, are widespread throughout the United States, and come from a variety of sources. These pollutants are called "criteria" air pollutants. National Ambient Air Quality Standards (NAAQS) have been established for each of them to meet specific public health and welfare standards. The EPA has established NAAQS for the following six criteria pollutants: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter, and lead. The CARB has set California Ambient Air Quality Standards (CAAQS) for the same six pollutants, as well as four additional pollutants: sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

The SFBAAB is designated non-attainment for ozone, coarse particulate matter, and fine particulate matter with respect to CAAQS, and ozone and fine particulate matter with respect to NAAQS. The BAAQMD has established thresholds of significance for criteria pollutant emissions. Although this is not a construction project, project equipment would generate criteria pollutants and some construction emissions control measures would be appropriate. Per the BAAQMD CEQA Air Quality Guidelines, construction-related impacts to air quality would be potentially significant if construction activities would generate emissions in excess of the daily emission quantities specified in Table 1, Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors.[16]

Table 1. Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors.

Pollutant/Precursor	Daily Average Emissions (pounds per day)
Reactive Organic Gases	54
Nitrogen dioxide	54
Coarse Particulate Matter	82*
Fine Particulate Matter	54*

Source: BAAQMD. CEQA Air Quality Guidelines

* Applies to construction exhaust emissions only

Vegetation removal activities would generate temporary emissions from the use of gas- or diesel-powered vegetation removal equipment, vehicles, and worker vehicle trips. Fugitive dust would also be emitted due to overland travel and vegetation removal activities. Given the short duration (3 weeks) and small scale of project activities, which do not include grading or construction of permanent structures, the

[14] Title 40, Part 1054 Code of Federal Regulations.

[15] Bay Area Air Quality Management District (BAAQMD). 2017. CEQA Air Quality Guidelines. Available at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed June 5, 2019.

[16] Landscape Equipment Running Emission Factors CALEEMOD User's Guide for CalEEMod Version 2016.3.2 Appendix D Table 7.2 Landscape Equipment Running Emission Factors.

potential for emissions to approach the NAAQS or CAAQS or BAAQMD thresholds of significance is negligible. Chainsaw operation would be the primary source of air quality emissions. A chainsaw operated at full power for 10 consecutive hours—a conservative scenario that is unlikely to occur—would produce approximately 7 pounds of reactive organic gases per day, 0.12 pound of nitrogen dioxide per day, and 0.07 pound of course particulate matter and fine particulate matter per day. These emission quantities are far below the thresholds identified in Table 1.[17] However, given that the project would emit air quality emissions, PG&E would implement Mitigation Measure (MM) AQ-1, which includes a suite of airborne pollution control measures. In addition, the BAAQMD recommends implementation of Basic Construction Mitigation Measures, regardless of whether or not construction-related emissions exceed applicable thresholds.[17]

In this case, because some project activities such as the operation of wood chippers, electrical generators, and tree trimming trucks are similar to construction activities, PG&E would implement MM AQ-2, which would require the implementation of the BAAQMD Basic Construction Mitigation Measures where applicable. The project would not cause population growth or a regional increase in vehicle miles traveled and would last for a limited time (up to 3 weeks). It should also be noted that protecting the structural integrity of the pipeline would reduce the potential for a catastrophic wildland fire, which would result in the large-scale release of criteria emissions. With the implementation of MM AQ-1 and MM AQ-2, the project would not result in a cumulatively considerable net increase of any criteria pollutant. Impacts would be less than significant with mitigation.

Long term operational emissions would include emissions during vehicle trips to and from the work areas for maintenance activities and the use of gas-powered hand tools (e.g., weed whackers and chainsaws) to trim vegetation. Maintenance activities would occur once every 2 to 3 years and would typically be of shorter duration than the projected initial 3-week project. Emissions generated during operational maintenance would be below BAAQMD thresholds of significance, and impacts would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors within 0.5 mile of the project include residences, a mobile home park, and Half Moon Bay High School. Given its relatively short duration (3 weeks) and small scale, the project would not generate substantial levels of air emissions. Sensitive receptors within 0.5 mile of the project would not be adversely affected based on implementation of MM AQ-1 and MM AQ-2. Therefore, potential impacts to sensitive receptors would be less than significant with mitigation.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The project does not include any elements that would generate objectionable odors, and no impact would occur.

Mitigation Measures

MM AQ-1 PG&E shall implement the following measures if project activities have the potential to create any airborne pollution:

a. Control all sources of potential airborne pollutants.

[17] Landscape Equipment Running Emission Factors CALEEMOD User's Guide for CalEEMod Version 2016.3.2 Appendix D Table 7.2 Landscape Equipment Running Emission Factors.

b. Provide a water truck on-site during any time there is potential for dust generation (including winter).

c. Cover or wet all stockpiles with potential for wind erosion.

d. Respond quickly if dust or airborne pollutants are observed.

e. Properly contain trash.

MM AQ-2 PG&E shall implement the Basic Construction Mitigation Measures provided in the BAAQMD CEQA Air Quality Guidelines. Some standard measures would not apply because the project does not include grading, paving, or similar construction activities.

a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day during dry weather.

b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.

e. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points.

g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

h. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

IV. Biological Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(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 Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Environmental Issues		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 Game or US Fish and Wildlife Service?	☐	☒	☐	☐
(c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
(d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☒	☐
(e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
(f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☒

Environmental Evaluation

The evaluation of potential project impacts to biological resources is based on the Biological Technical Study prepared for the project (see Appendix A); information compiled by the City in support of the LCLUP update process that is currently underway; and the 2018 NEPA EA, BAHCP, and ITP.

Would the project:

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 Game or U.S. Fish and Wildlife Service?

SENSITIVE PLANTS

A list of special-status plant species was compiled by conducting a search of the California Natural Diversity Database (CNDDB) for a 2-mile buffer surrounding the study areas, reviewing the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) with a 2-mile search radius, and a query of the California Native Plant Society (CNPS) database for the Half Moon Bay quadrangle. Based on the findings from these database searches, 10 special-status plants were evaluated for their potential to occur within the study areas. Of these 10 species, none were found to have greater than a low potential to occur. The low potential to occur is primarily due to an absence of suitable habitat types to support the coastal scrub, dune, and chaparral species that were identified as occurring regionally. The specific observations and rationale for each evaluation are presented in Table 1 of the Biological Technical Study in Appendix A.

SENSITIVE WILDLIFE

A list of special-status wildlife species with potential to occur in the study areas was compiled by conducting a CNDDB search for a 2-mile buffer surrounding the study area and reviewing the USFWS

IPaC species list. Reconnaissance-level surveys were conducted at the project sites on March 8 and August 28, 2018, by Stantec. Twenty-three special-status wildlife species were documented or have suitable habitat in the study areas or vicinity, and are summarized in Table 2 of the Biological Technical Study in Appendix A. Of these 23 special-status wildlife species, seven have a moderate or high potential to occur and 16 have a low or no potential to occur. The species with moderate or high potential to occur are described below.

California Red-Legged Frog

The CRLF was federally listed as a threatened species on May 23, 1996. Revised critical habitat for this species was designated by USFWS on March 17, 2010. It is also a California Special Species of Concern (SSC). CRLF breed primarily in ponds but may also use slow-moving streams or deep pools in seasonal streams for breeding. Ideal ponds have a mix of deep sections for escaping from predators and shallow sections that warm quickly and help the maturation of tadpoles and juveniles. Some emergent vegetation or shoreline vegetation such as cattails, bulrushes, or willows is also required for attachment of egg masses. Introduced species such as bullfrogs (*Lithobates catesbeianus*), largemouth bass (*Micropterus salmoides*), common carp (*Cyprinus carpio*), and mosquitofish (*Gambusia affinis*) may prey upon one or more life stages (eggs, tadpoles, or adults) of CRLF. Radio-tagged individuals have been found as far as 2 miles from suitable aquatic breeding habitat, and the species may aestivate in small mammal burrows in uplands or may spend non-breeding time during the summer or winter in other aquatic habitats that are not otherwise suitable for breeding.

The project areas are within the historic and current range of CRLF. They are also within the boundary of the Central Coast Recovery Unit, based on the core area maps provided in the USFWS CRLF Recovery Plan. The project is located outside of CRLF critical habitat, but critical habitat unit SNM-1 (San Mateo) is located approximately 0.1 mile from the Northeast Work Area and 0.25 mile from the Southwest Work Area. A review of the CNDDB shows five occurrences of CRLF to the north and west of the study areas, four of which occur within intermittent or perennial streams, and the last occurrence within coastal scrub habitat along the Half Moon Bay Coastal Trail. The nearest record, from 2006, is of an adult observed in the Pilarcitos Creek corridor, approximately 0.5 mile west of the Southwest Work Area. While there are only five CNDDB occurrences for CRLF within 2 miles of the project sites, there are several permanent ponds approximately 0.1 mile northeast of the Northeast Work Area and 30 feet southwest of the Southwest Work Area, which appear to have generally suitable breeding habitat and are adjacent to the Pilarcitos Creek corridor.

Recently compiled biological data used in preparing the LCLUP update identifies the pond within the northwest corner of the POST property (approximately 25 feet south of the Southwest Work Area) as CRLF Breeding Site and ESHA (see Figure 2).[18] Additionally, the area surrounding the pond and within the Southwest Work Area is identified as *Potential ESHA and Potential SFGS and/or CRLF Upland, Foraging and Dispersal Habitat* (see Figure 2).[18] Portions of the Northeast Work Area falls within designated *ESHA and CRLF Upland, Foraging, and Dispersal Habitat and SFGS Habitat* (see Figure 2).[18] The ESHA determinations are based on information in the *Half Moon Bay Community Park Master Plan* that was prepared in 2006, for a proposed park on the POST property that was never developed.[3] The Master Plan notes that 14 juvenile and adult CRLF were observed in the cattail marsh/pond. This sighting is not currently included in the CNDDB. In 2018, a follow-up reconnaissance level survey was conducted, as part of the LCLUP update process. No CRLF were observed, but the biologist concluded that the pond held water year-round and was still suitable habitat for CRLF and SFGS.

[18] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

Arroyo willow thicket, positioned as the riparian vegetation at the Northeast Work Area, is also suitable as refuge habitat at any season of the year. The eucalyptus woodland is not optimum as refuge habitat because of the oils associated with that tree species, but the debris and ground cover may still provide suitable refuge habitat that may be occupied at any time of the year. For the reasons described above, the potential for CRLF to occur in the study areas is high.

Steelhead-Central California Coast Distinct Population Segment

The Central California Coast (CCC) Distinct Population Segment (DPS) of steelhead (*Oncorhynchus mykiss irideus*) is listed as federally threatened. Critical habitat for the CCC steelhead DPS was designated on May 5, 1999, and revised September 5, 2005. Their range is defined by the National Oceanic and Atmospheric Administration (NOAA) Fisheries as all naturally spawned populations from the Russian River south to Aptos Creek in Santa Cruz County, including drainages of San Francisco, San Pablo, and Suisun Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers. Steelhead employ a variety of life cycle strategies that take advantage of the diversity of river systems and regional conditions to which they are adapted. Adults migrate from their marine environment to freshwater systems, and these migrations can be hundreds of miles. Deep, low-velocity pools are important wintering habitat, and spawning habitat consists of gravel substrates free from excessive silt.

The study area is within the historic and current range of steelhead. The section of Pilarcitos Creek in the study area is within critical habitat for this species. The nearest CNDDB record, from 1979, is in Frenchmans Creek, approximately 1.3 miles north of the Northeast Work Area. While the section in the study area does not contain suitable rearing habitat, there may be suitable breeding habitat farther up Pilarcitos Creek, and migrating fish could be present whenever the water level is high enough at any time throughout the year. For the reasons described above, the potential for steelhead to occur in the study area for the Northeast Work Area is proposed to be moderate at any time of year when water levels are adequate to support the species.

San Francisco Garter Snake

The SFGS is listed as a federal and state endangered species. It is currently distributed throughout the County and northern Santa Cruz County.[19] The SFGS is one of 12 subspecies of *Thamnophis sirtalis*, the most widely distributed snake in North America. The SFGS can generally be distinguished by the presence of a lateral red longitudinal stripe bordered by black on both sides, whereas the California red-sided garter snake (*Thamnophis sirtalis infernalis*) has reddish bars which break up the black lateral coloration.[20] SFGS are typically found near aquatic habitats including ponds, creeks, canals, and freshwater marshes that support breeding populations of their primary prey, CRLF, and Pacific tree frogs (*Pseudacris regilla*). Birds such as hawks and herons, domesticated cats and other small mammals, adult bullfrogs, and even other snakes are considered predators of this species.

SFGS are primarily active above ground from early March to July during mating, with females giving live birth from June through September. Feeding activities and movements may continue into the fall months. During the winter, SFGS are known to retreat to upland hibernacula, which include rodent burrows and dense mats of grass, but may be found basking outside these winter hibernacula during warm days. These important upland hibernacula are often found on south-facing slopes that support grassland and coastal scrub. Within suitable aquatic habitat, SFGS are known to move approximately 1.3 miles (2.1 kilometers [km]) over 111 days and approximately 1.0 miles (1.7 km) over 74 days. Occurrences of snakes moving a

[19] U.S. Fish and Wildlife Service (USFWS). 2006. San Francisco Garter Snake, p 13. Available at: https://ecos.fws.gov/docs/five_year_review/doc774.pdf. Accessed July 17, 2019.

[20] Stebbins, R. C., and S. M. McGinnis. 2012. *Field Guide to Amphibians and Reptiles of California*, p. 13.

maximum distance of 0.4 mile (671 meters) have been documented at the West of Bayshore site near the San Francisco International Airport. SFGS at Año Nuevo State Reserve and Pearson Ranch remained within 323 to 656 feet (100 to 200 meters) of pond foraging habitats and upland sites.

There are two CNDDB occurrences within 2 miles of the project. The nearest occurrence, from 2004, is approximately 0.4 mile southwest of the Southwest Work Area; one adult was observed in a weedy field adjacent to the Pilarcitos Creek riparian corridor. While no CRLF, an important prey species for SFGS, were observed during the March 2018 site visit by Stantec Consulting Services (see Appendix A) or the July 2018 site visit by Jennings,[7] there is suitable habitat for this species (and other frog species) along the Pilarcitos Creek riparian corridor and nearby perennial ponds. Recently compiled biological data used in preparing the LCLUP update identifies the area surrounding the cattail/marsh pond in the northwest corner of the POST property as Potential ESHA and Potential SFGS and/or CRLF Upland, Foraging and Dispersal Habitat (see Figure 2).[21] Additionally, portions of the Northeast Work Area fall within designated ESHA and CRLF Upland, Foraging, and Dispersal Habitat and SFGS Habitat (see Figure 2).[22] In general, SFGS are known to inhabit the lower reaches of Pilarcitos Creek, and they are a mobile species within suitable habitat corridors like Pilarcitos Creek. Arroyo willow thicket and Himalayan blackberry scrub, positioned in proximity to Pilarcitos Creek at the Northeast Work Area, are suitable as habitats for foraging or as a refuge at any season of the year. The eucalyptus woodland is not optimum as a habitat to provide refuge because of the canopy cover that shades the ground (limiting basking locations in direct sun during winter), but the debris and ground cover is apt to provide suitable refuge habitat that may be occupied, nonetheless. For the reasons described above, the potential for SFGS to occur in the study areas is high.

Western Pond Turtle

Western pond turtle (WPT; *Actinemys marmorata*) is a California SSC. Their range is throughout California, from southern coastal California and the Central Valley, north to the Cascade and eastern Sierra Nevada mountain ranges. WPTs occur in a variety of permanent and intermittent aquatic habitats, such as ponds, marshes, rivers, streams, and ephemeral pools. They require slack or slow-water habitat for feeding, as well as suitable dry habitat such as rocks or fallen logs for basking and hauling out. In addition to appropriate aquatic habitat, these turtles require an upland nesting site in the vicinity of the aquatic habitat, often within 656 feet (200 meters). Nests are typically dug in grassy, open fields with soils that are high in clay or silt, and which are in direct sunlight to provide warmth for incubation of the eggs. Egg laying usually occurs between March and August. There is suitable aquatic habitat for WPT in Pilarcitos Creek as well as the irrigation pond located 30 feet south of the Southwest Work Area. There may also be suitable upland habitat for WPT particularly in the wild oat grassland or agricultural landcover where areas of soft soils may provide suitable nesting substrate. The potential for WPT to occur in the project area is proposed to be high because of the proximity of occurrence records and the presence of suitable upland breeding habitat and aquatic habitat within proximity of the project area.

Saltmarsh Common Yellowthroat

Saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*) is listed as a California SSC. The current breeding range for this species stretches from western Marin County down to San Mateo County, where breeding habitat consists of the coastal riparian and wetland areas. Common yellowthroats occur year-round in their breeding range. Nesting habitat includes woody swamp, brackish marsh, and freshwater marsh, with the majority (approximately 65 percent) occupying either brackish or salt marsh systems.

[21] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

[22] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

Common yellowthroats build open cup nests that are well concealed near the ground, in herbaceous vegetation. The diet of saltmarsh common yellowthroat consists mostly of insects and spiders. This species has been susceptible to non-native predators, and cowbird parasitism has been cited as reducing reproductive success.

There are two CNDDB occurrences, both from 1990, within 2 miles of the project areas. The nearest record is approximately 1 mile northwest, near the mouth of Pilarcitos Creek as it drains into the ocean. Suitable habitat is present in the project areas, including the arroyo willow thicket along the Pilarcitos Creek and in the Himalayan blackberry scrub. The potential for this species to occur in the project area as a nesting species is proposed to be high because breeding is common in suitable habitat within San Mateo County.

Roosting Bats

Bats are widespread within California and may be found in any habitat. They are nocturnal aerial predators of insects and other arthropods, and often forage over open water, marshes, and other moist, open areas where flying insects tend to congregate. Different bat species have different roosting requirements and roosts can be found in a variety of habitats and locations. Day roosts, used from sunrise to sunset, provide a protected and sheltered location for bats to rest and sleep within a short flight to foraging areas and a site to raise their young. During the day, bats may use three types of roosts: crevices, cavities, and foliage, and this selection may be species specific. Crevice and cavity roosts may be found in natural and human-made features such as caves, cliffs, rock outcrops, trees, mines, buildings, bridges, and tunnels.

Night roosts, which are used from approximately sunset to sunrise, are primarily sites where animals congregate to rest and digest their food between foraging bouts. Night roosts are often located in more open but protected areas such as overhangs on buildings and recessed areas on the undersides of bridges, where warm air is trapped and the concrete and steel thermo-regulate and retain heat better.

Two special-status bat species, western red bat (*Lasiurus blossevillii*) and pallid bat (*Antrozous pallidus*), have the potential to occur within the project area based on range, habitat, and roosting preference. Both species have been found to roost in tree foliage, hollows, or cavities. While there are no recorded occurrences for these species within a 2-mile buffer of the project area, bats in general may be under-reported to the CNDDB relative to their actual abundance in the environment. This may be in part because they are nocturnal, difficult to detect, and difficult to positively identify and count when detected. Therefore, the potential for these two species of roosting bat within the project area is moderate.

IMPACTS TO SPECIAL-STATUS SPECIES

Reconnaissance-level surveys were conducted at the project sites on March 8 and August 28, 2018, and confirmed that existing conditions at the project site did not provide suitable habitat for the 10 identified special-status plant species. No special-status plants were observed within the study areas during the reconnaissance surveys. These documented special-status plants are not expected to occur in the project area; therefore, no impacts to special-status plant species would occur.

Four species of special-status wildlife were determined to have a high potential to occur in the project area: CRLF, SFGS, WPT, and saltmarsh common yellowthroat. Additionally, two special-status wildlife species are proposed to have a moderate potential to occur in the project area: steelhead and bats. The evaluation of impacts to these special-status wildlife species are described in the subsections that follow.

Steelhead

Migrating steelhead may be present in Pilarcitos Creek if work occurs when the water level is high enough to allow passage. There is no vegetation removal proposed within the riparian corridor of arroyo willow thicket, so there is visual screening between the creek and the proposed tree removal activity. The vegetative screening would prevent any startle reflex by the fish and avoid direct impact by preventing any impact to migration within the creek.

Since trees are not proposed for removal within the arroyo willow thicket, there is no potential for any decrease in shade along that section of the creek, and no changes in sedimentation or runoff volumes that would be considered indirect impacts. There is no direct or indirect impact anticipated from the proposed tree removals along the pipeline alignment. As a result, impacts to steelhead would be less than significant. Additionally, PG&E would implement MM BIO-1, which includes general control measures to minimize potential impacts to biological resources. Implementation of MM BIO-1 would further reduce already less-than-significant impacts to steelhead.

California Red-Legged Frog and San Francisco Garter Snake

Suitable aquatic habitat for CRLF and SFGS is present in and around the riparian corridor for Pilarcitos Creek, as well as several nearby ponds (see Figure 2). As previously described, the cattail marsh/pond, located approximately 25 feet south of the Southwest Work Area (see Figure 2) is identified as a CRLF breeding site in the current public draft update of the LCLUP.[23] Additionally, portions of the Southwest Work Area occurs within designated *Potential ESHA and Potential SFGS and/or CRLF Upland, Foraging and Dispersal Habitat* (see Figure 2).[24] Portions of the Northeast Work Area falls within designated *ESHA and CRLF Upland, Foraging, and Dispersal Habitat and SFGS Habitat* (see Figure 2).[25]

Upland habitats within the project area are accessible to both species, and the Monterey pine forest and eucalyptus woodland are broadly suitable to provide hibernacula for both species, although garter snake tend to prefer more open habitats so that they may bask outside the burrows on sunny days. The eucalyptus woodland is accessible from Pilarcitos Creek, but for wildlife to access the Monterey pine forest from Pilarcitos Creek, they would have to cross SR-92, which appears to be a partial barrier for CRLF and SFGS but not a complete barrier. Due to the aquatic habitat nearby, and the accessible uplands within the project area, there is a high potential for these species to occur in the work area as individuals foraging, aestivating, hibernating, or transiting through the habitat types that surround the aquatic resources and the riparian corridor.

Work activities would result in removal of trees in eucalyptus woodlands, limited areas of woody brush and trees planted along the paved pedestrian path adjacent to SR-92. Removal of this vegetation would not cause long-term impacts due to habitat modification for several reasons:

1. Eucalyptus woodlands do not provide an abundant source of either species' primary prey species, the Pacific tree frog. The riparian corridor and Pilarcitos Creek itself are likely to be the primary foraging habitats.
2. Eucalyptus do not provide breeding habitat for CRLF.

[23] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

[24] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

[25] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

3. Eucalyptus are generally suitable but not preferred habitat for hibernation by SFGS.
4. Eucalyptus do not provide any unique habitat that is necessary during a life-history period for either species.
5. The area of habitat to be modified is relatively small.
6. The quantity of similar habitat type is not limited in the vicinity of Pilarcitos Creek.
7. All work occurring within the Southwest Work Area would avoid the designated CRLF breeding site, which is encircled by a chain-link fence. Therefore, removal of the trees within the Southwest Work Area would not alter the local hydrology, topography, or shading of the designated CRLF breeding site and associated vegetation.

There is a risk of direct impact on individuals that may be present during work activities. However, PG&E would implement MM BIO-1 and MM BIO-2 to reduce the potential for species to be impacted during vegetation removal, and by following measures defined by the BAHCP (Permit Number TE56826C-0).[26]

PG&E has proposed using herbicides to the cut stumps and to control future saplings that may recolonize the site. Herbicide use is subject to the *2006 Final Stipulated Injunction*, as amended by subsequent legal actions (Stipulated Injunction), resulting from the Center for Biological Diversity vs. USFWS, et. Al. case, that required the EPA to establish a schedule to complete reviews of the effects of pesticides on federally protected wildlife species.[27] The EPA is assessing the effects of products containing any of 75 pesticide[28] active ingredient to 11 federally listed threatened or endangered species in the San Francisco Bay Area, including CRLF and SFGS. The stipulated injunction established interim protective measures in the form of no-use buffer zones adjacent to certain habitat features until the EPA has completed its review and any necessary consultation with the USFWS regarding the potential effects of a pesticide active ingredient to the subject species.

A portion of the Southwest Work Area falls within a stipulated injunction zone for SFGS.[29] Within this zone, pesticides containing any of the listed active ingredients subject to the injunction are not permissible within 200 feet of any water feature. Additionally, the injunction prohibits use of listed pesticides within critical habitat areas for the CRLF and within 60 feet of aquatic features within non-critical habitat areas.[30] Because portions of both the Southwest Work Area and Northeast Work Area are within 60 feet of aquatic features, pesticides containing any of the active ingredients subject to the injunction could not be used as part of the project.

If herbicides are used, they would not be broadcast sprayed and would not be discharged to sensitive habitat areas, coastal waters, or wetlands. Herbicides would not be used within an ESHA or ESHA buffer area where herbicides would affect an ESHA. Herbicide use would have to be approved by the City and other responsible agencies prior to use, and the type used and buffer for application away from water bodies would comply with the *2006 Final Stipulated Injunction* and Related Information Involving

[26] PG&E. 2017. Bay Area Habitat Conservation Plan Operations and Maintenance.

[27] Center for Biological Diversity vs. USFWS. United States District Court for the Northern District of California San Francisco Division, Case No. 3:11-cv-5108-JSW. Available online at: https://www.fws.gov/endangered/what-we-do/pdf/2014_0728_amended_settlement.pdf. Accessed September 10, 2019.

[28] The term pesticides includes herbicides, insecticides, fungicides, and other substances used to control pests and weeds.

[29] EPA. 2017. San Francisco Bay Area - Map Tool to Identify Interim Pesticide Use Limitations. Available at: https://www.epa.gov/endangered-species/san-francisco-bay-area-map-tool-identify-interim-pesticide-use-limitations. Accessed September 10, 2019.

[30] EPA. 2017. Court Issues Stipulated Injunction Regarding Pesticides and the California Red-legged Frog. Available at: https://www.epa.gov/endangered-species/court-issues-stipulated-injunction-regarding-pesticides-and-california-red-legged. Accessed September 10, 2019.

Pesticides, CRLF, and SFGS; and would be rated for aquatic use by the California Department of Pesticide Regulation and the USFWS approved BAHCP and ITP, per MM BIO-2, which includes compliance with the Stipulated Injunction. As a result, direct impacts would be less than significant with mitigation.

No significant indirect impacts are anticipated because the removal of trees would not substantially alter the habitat types available to the species, nor is the removal expected to result in any changes to aquatic features within the project area through changes in runoff, water quality, or any other measure of habitat quality. As a result, indirect impacts would be less than significant.

Nesting Birds

Habitats found within the study areas provide suitable nesting bird habitat. No raptor nests were observed during the site visit; however, there is a potential for raptors to nest in the large blue gum eucalyptus, Monterey pine trees, and cypress trees within the project site. The riparian corridor also provides suitable nesting habitat for saltmarsh common yellowthroat in shrubs and in stands of dense vegetation. Tree removal activities have the potential for both direct and indirect impacts. Raptors and other nesting birds could be impacted directly by the removal of a tree containing an active nest, or indirectly by removal of trees causing disturbance and abandonment of a nest. However, PG&E would implement MM BIO-1 and MM BIO-3 to reduce the potential for impacts to actively nesting birds within the project areas. As a result, impacts would be less than significant with mitigation.

Roosting Bats

Species of bats that roost in forested and riparian habitats may be present in the large eucalyptus trees, willows, and cypress trees slated to be removed. Two special-status bat species have the potential to occur within the project area. These include western red bat, a tree roosting species, and pallid bat. Western red bats may roost in the foliage of broad-leafed trees, such as cottonwood and sycamore, and in willow riparian habitats. Pallid bats preferentially select caves or crevices, but they also roost in hollows and crevices of large trees. While there is little information on the use of non-native eucalyptus by native bats, there have been documented accounts of two western red bats utilizing non-native river red gum eucalyptus leaf litter as an overwintering site. Based on the presence of suitable foraging and roosting habitat, western red bats and pallid bats are considered to have a moderate potential to occur within the project area.

Removal of trees may have direct impact on roosting bats if they are not detected and allowed to leave the area prior to tree removal. Indirect impacts through reduction of roosting habitat availability are not anticipated because of the abundance of similar eucalyptus habitat along Pilarcitos Creek. Further, PG&E would implement MM BIO-1 and MM BIO-4 to minimize potential direct impacts to bats. As a result, impacts to bats would be less than significant with mitigation.

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 Game or US Fish and Wildlife Service?

The project would occur primarily within the eucalyptus woodland ESHA. The eucalyptus woodland present in the study areas for the Northeast and Southwest Work Areas are comprised primarily of mature blue gum eucalyptus ranging in height from 25 to 140 feet in the overstory, and blackwood acacia (*Acacia melanoxylon*), blackberry (*Rubus ursinus)*, and poison oak (*Toxicodendron diversilobum*) making up the shrub layer. The eucalyptus woodland meets the definition of an ESHA because it has a potential to be used by raptors for nesting or by monarch butterflies (*Danaus plexippus*) for seasonal roosting. Per the adopted 1993 LCLUP, eucalyptus trees themselves are considered to be a "…particularly

undesirable, invasive…" species. Subsequent updates to the LCLUP (2014) have recognized that a eucalyptus woodland may be considered ESHA under the LCLUP if it provides suitable habitat for rare or endangered species. The public draft of the LCLUP update identifies forests, including eucalyptus, Monterey pine, and Monterey cypress, as areas that could potentially be considered ESHA due to their potential to provide roosting/nesting habitat for avian species (particularly raptors), and roosting habitat for bats and monarch butterflies.[31]

The location and extent of the eucalyptus woodland habitat ESHA within the project area is shown in Figure 2b of the Biological Technical Study in Appendix A. PG&E proposes to remove 57 trees from the eucalyptus woodland habitat ESHA in the Northeast Work Area.[32] No trees would be removed from the eucalyptus woodland habitat ESHA in the Southwest Work Area. However, six Monterey cypress trees and two Monterey pines would be removed, which are located approximately 50 feet north of the cattail marsh/pond which is identified as a CRLF breeding site and ESHA in the current public draft update of the LCLUP. Additionally, the area surrounding the pond including the Southwest Work Area is designated as potential SFGS and/or CRLF upland, foraging, and dispersal habitat.

The trees (primarily eucalyptus) slated for removal may provide suitable nesting habitat for avian species. No raptor nests were observed during the reconnaissance surveys. The removal of these trees has the potential for direct impact through the removal of active nests or disturbance which could cause nest abandonment. However, PG&E would implement MM BIO-4 to reduce the potential for impacts to actively nesting birds within the project area. Additionally, the forested habitat outside of the project area supports large swaths of eucalyptus habitat. Within 2 miles of the work area, there are approximately 735 acres of eucalyptus stands available as potential nesting or roosting habitat. Overall, the removal of 79 trees (primarily eucalyptus) would be a minimal reduction of potential nesting habitat in this greater landscape. The removal of these trees accounts for a removal of approximately 0.3 acre of available eucalyptus nesting or roosting habitat.

Monarch butterflies are not currently listed as special-status species under federal and state legislation nor are they listed as rare and endangered under Section 18.38.085 of the Half Moon Bay Municipal Code. As such, monarch butterflies were not evaluated in the Biological Technical Study as a species with potential to occur within the project area. However, the International Union for Conservation of Nature and Natural Resources has classified the monarch migration and overwintering locations as a "threatened phenomenon and the World Wildlife Fund has classified monarch butterflies as "near threatened".[33] Per the draft update to the LCLUP and Half Moon Bay Bicycle and Pedestrian Master Plan IS/MND, three winter roost sites for monarchs are noted in the CNDDB in eucalyptus groves from the area of Frenchmans Creek (specifically the area around the Sweetwood Group Camp) and from a eucalyptus grove near the end of Magnolia Avenue in Wavecrest. Neither of these locations are near the project.[34,33] A recent study by Griffiths and Villablanca has shown that monarchs require tree-species diversity, particularly mixed-species stands containing conifer species, and do not preferentially select eucalyptus-only stands.[35] This study suggests that monarchs may preferentially cluster and overwinter on conifers if given the choice. Furthermore, there are significant patches of eucalyptus habitat outside of the project

[31] 2018-2019 Draft Local Land Use Plan Update. 2018. Chapter 6, Natural Resources. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

[32] The Biological Technical Study indicates that 59 trees are slated for removal in the Eucalyptus woodland ESHA. However, two trees are no longer proposed for removal, as they are located in the riparian area.

[33] City of Half Moon Bay. 2019. Half Moon Bay Bicycle and Pedestrian Master Plan IS/MND. Available online at: https://www.half-moon-bay.ca.us/DocumentCenter/View/2243/Bicycle-and-Pedestrian-Master-Plan-Final-Draft?bidId=/ Accessed October 4, 2019.

[34] 2018-2019 Draft Local Land Use Plan Update. 2018. Chapter 6, Natural Resources. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

[35] Griffiths, J., and F. R. Villablanca. 2015. Managing monarch butterfly overwintering groves: making room among the eucalyptus. California Fish and Game 101(1):40–50.

area (approximately 735 acres within a 2-mile radius) and as with nesting birds, the removal of 57 trees (primarily eucalyptus) from the project area would be a minimal impact to the potential eucalyptus habitat in this landscape.

When considered at a landscape level, as described above, the tree removals within the project area are relatively limited. The project area is not known to have any record of use by monarch butterflies as a roost. For these two reasons, the work is proposed to have less-than-significant impacts to eucalyptus forest ESHA.

PERENNIAL CREEK BUFFER ZONE

Extending from the riparian vegetation by 50 feet, a perennial creek buffer zone is designated as a planning tool by the City and development is restricted within the 50 feet of riparian vegetation. Therefore, the area within 50 feet of the riparian corridor—which is mapped within the Northeast Work Area as a mix of landcover types including arroyo willow thicket, Himalayan blackberry scrub, and eucalyptus woodland (Figure 2b of the Biological Technical Study in Appendix A)—falls within this designation of a perennial creek buffer zone. Nine trees are proposed for removal in this zone, in a linear pathway within 5 feet of the edge of the pipeline.

Regarding the allowable activities within perennial creek buffer zones, the adopted LCLUP, zoning code, Coastal Act, and the draft update LCLUP provide performance standards stating that vegetation removal be limited to the minimum necessary to achieve project goals. Per regulation, "timbering" is allowed in perennial creek buffer zones. Further, certain activities such as maintenance and emergency repairs may necessitate reduced buffer widths. Maintaining a clearance around PG&E's existing natural gas transmission pipeline within the perennial creek buffer is a necessary maintenance activity that would be consistent with City policies and regulations. This maintenance activity is required in order to maintain safety standards around the pipeline.

The vegetation removal is an important maintenance activity that is necessary to protect the structural integrity of the existing pipeline. It would be compatible with performance standards, and the removal of nine trees would have no impact on the perennial creek buffer.

CATTAIL MARSH / POND

The local Zoning Code establishes a 100-foot buffer surrounding wetlands and ponds. This buffer does not apply to manmade agricultural ponds. However, ponds that have not been actively used for agricultural purposes for 5 years are classified as abandoned and the buffer then applies. The cattail/marsh pond located in the northwest corner of RW-V 2198-15 (Southwest Work Area) has not been actively managed for agricultural use for approximately 10 years. Consequently, the ESHA buffer applies.

Utility maintenance activities are allowed within ESHA buffers. PG&E proposes to remove 11 trees within the Southwest Work Area. Eight of these trees are within 50 feet to the north of the cattail marsh/pond, which is identified as a CRLF breeding site and ESHA (see Figure 2).[36] Additionally, the area surrounding the pond and within the Southwest Work Area is designated as Potential ESHA and Potential SFGS and/or CRLF Upland, Foraging and Dispersal Habitat (see Figure 2).[37] All of the trees are separated from the pond and associated vegetation by an existing chain link fence and are located at a lower elevation than the pond berm. The trees were planted as ornamental landscaping along SR-92. Tree stumps and roots would be left in place, and no grading or excavation would occur. Consequently,

[36] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

[37] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

tree removal activity would not adversely affect local hydrology, soils, shading, or vegetation located on the banks or within the pond.

The proposed staging area for the Southwest Work Area is located within a previously disturbed area associated with the City Maintenance facilities on the POST property (see Figure 2). Additionally, the area adjacent and to the east of the POST property and Southwest Work Area is occupied by parking lots and commercial businesses and is zoned for industrial land uses. The temporary staging area is consistent with existing activities and is located approximately 0.1 mile from Pilarcitos Creek. Staging area activities would have no effect on the ecological characteristics of the pond or Pilarcitos Creek.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The project would not occur within a federally or state-protected wetland, and no impacts would occur. However, PG&E proposes to remove 11 trees within the Southwest Work Area, RW-V-2198, eight of which are approximately 50 feet north of the cattail marsh/pond. This pond is identified as a CRLF breeding site and ESHA in the public draft LCLUP[38]. Tree stumps and roots would be left in place, and no grading or excavation would occur. Consequently, tree removal activities would not adversely affect local hydrology, soils, or wetland indicator plant species. Further, City policies and regulations permit utility maintenance activities within wetland and pond ESHA buffer areas.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project does not include any features that would permanently interfere with wildlife movement from one area to another. The project is located within or near suitable habitat for CCC steelhead DPS, CRLF, SFGS, saltmarsh common yellowthroat, and roosting bats. The project involves the removal of trees and brush located along or adjacent to the existing natural gas pipeline. No permanent structures, fences or new roads would be constructed. Consequently, the project would not permanently impede wildlife movement. Work activities would occur outside of the Pilarcitos Creek ordinary high-water mark and riparian corridor and, therefore, would not interfere with the movement of CCC steelhead DPS.

Work would be conducted during the dry season or during dry conditions,[39] to minimize potential interference with CRLF and SFGS dispersing to and from breeding sites. If CRLF or SFGS do occur within the project areas, foraging and dispersal opportunities may be temporarily reduced during the vegetation removal period. Impacts to wildlife movement would be less than significant because project activities would not occur at any one specific location longer than 1 week, and barriers to migration would be temporary and would not occupy a significant portion of the dispersal area. Furthermore, a biologist would be present during all project activities to inspect work areas and surrounding areas to ensure no wildlife becomes entangled or entrapped in work materials and equipment. If necessary exclusionary fencing may be installed around the work areas at the discretion of the qualified biologist and/or City per MM-BIO 2. Impacts would be less than significant with mitigation.

While potential nesting and roosting sites for migratory birds and bats would be removed, hundreds of acres of suitable nesting and foraging habitat are present near the project and would remain undisturbed

[38] 2018-2019 Draft Local Land Use Plan Update. 2018. Figure 6-3, Special-Status Species ESHAs. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

[39] Dry conditions are defined as: (i) no measurable precipitation having fallen within the 48 hours before the start of work; (ii) no measurable precipitation falling during work; and (iii) no significant chance of rainfall in the weather forecast for the proposed work window. A significant chance of rainfall is a 60 percent or greater likelihood of precipitation, as identified by NOAA.

by project activities. Implementation of MM-BIO-3 would ensure that potential impacts to bats are avoided. If work occurs during bird nesting season, implementation of MM-BIO-4 would ensure that potential impacts to nesting birds would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Half Moon Bay land use policies and regulations provide protections for a broad range of biological resources including ESHA and wildlife. Project compliance with these policies and regulations are addressed above in CEQA questions a through d. Section 7.40 of the Half Moon Bay Municipal Code describes the role heritage trees play in the City. Heritage trees, as they pertain to the proposed projects, are defined as "A tree located on public or private property, exclusive of eucalyptus, with a trunk diameter of twelve inches or more, or a circumference of at least thirty-eight inches measured at forty-eight inches above ground level." Five trees proposed for removal conform to the description of a heritage tree, being a species other than eucalyptus, with a diameter-at-breast height greater than 12 inches in diameter (refer to Table 3 of the Biological Technical Study in Appendix A).

PG&E proposes to replace trees consistent with the City's Heritage Tree Ordinance (Section 7.40.060), including the blue gum eucalyptus, which is not considered a heritage tree under the ordinance (Section 7.40.020). As a result, PG&E would plant 35 24-inch box trees, per MM BIO-5. PG&E has proposed that the trees would be planted at the Potrero Nuevo Farm, which is a 300-acre farm south of the City, because some property owners have indicated that they do not want replacement trees planted on their property. Additionally, in some cases replacement planting on specific parcels may not be feasible or beneficial. The proposed mitigation site would improve habitat by introducing trees and shrubs around two existing ponds and along a nearby dirt road to provide habitat for local wildlife, carbon storage, and stabilize soil. The City has discretionary decision-making authority to determine the planting locations and species. Because the heritage trees would be replaced consistent with the City's Heritage Tree Ordinance, including the replacement of large eucalyptus trees that are not classified as heritage trees, the project would not conflict with local policies or ordinances regarding tree protection. As discussed above in sections b, c, and d, maintenance activities within required ESHA buffers are permitted subject to CDP approval. Consequently, the project does not conflict with local policies or regulations, and impacts would be less than significant.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project falls within the coverage of the PG&E BAHCP, and all applicable avoidance and mitigation measures provided in the BAHCP and associated federal permits would be required to be implemented during the project. As a result, the project would not conflict with the provisions of an adopted HCP, and no impact would occur.

Mitigation Measures

The following mitigation measures were originally requirements of federal permits and the BAHCP approved by the USFWS. In some cases, the City is proposing to modify these requirements to ensure compliance with local policies and regulations and to address project specific conditions.

MM BIO-1 The following general mitigation measures shall be implemented during the project:

a. When accessing work sites, limit travel and parking of vehicles and equipment to pavement, existing roads, right of ways, and previously disturbed areas.

b. No off-road vehicle travel.

c. Vehicle access across streams and wetlands shall not be permitted.

d. Laydown and staging shall be conducted in previously developed or disturbed areas as shown on project plans. Staging areas shall be located as far from Pilarcitos Creek and the cattail marsh/pond as possible.

e. Project activities shall minimize foot traffic and disturbance to the extent practicable.

f. Vegetation removal shall not exceed the minimum amount necessary to complete work at the site and as shown on project application materials.

g. All trash shall be removed from the project sites daily to prevent attracting wildlife to the project areas.

h. Before moving vehicles, chippers, and other heavy equipment, a qualified biologist approved by the City shall check for wildlife to ensure they are not crushed.

i. Other than vegetation identified for removal, no wildlife or plants shall be handled or removed from the site by anyone except biologists approved by the City.

j. Wildlife in project areas shall be permitted to leave on their own.

MM BIO-2 The following measures shall be implemented to minimize impacts to special-status amphibians and reptiles

k. A qualified biologist approved by the City, shall be on site for all work activities and shall perform a pre-activity survey each day before the start of work occurs to clear the work area of sensitive species. Monitoring results shall be submitted to the City. The biologist may require additional protection measures, including additional monitoring and the installation of wildlife exclusion fencing if determined to be appropriate by the biologist and/or City. Work shall be completed during the dry season, between June 1 and October 15. If work cannot be completed during this time, all work activities shall be performed during dry conditions. Dry conditions are defined as:

   i. No measurable precipitation having fallen within the 48 hours before the start of work.

   ii. No measurable precipitation falling during work.

   iii. No significant chance of rainfall in the weather forecast for the proposed work window. A significant chance of rainfall is a 60 percent or greater likelihood of precipitation as identified NOAA.

l. A qualified biologist, approved by the City, shall flag the work areas and all suitable burrows and/or crevices identified within these areas with highly visible flagging before work occurs.

m. If possible, no small mammal burrows shall be included in the work areas and/or access routes. If not possible, work shall not commence until otherwise directed by the biologist and the City.

n. The biologist shall inspect the flagged burrows or crevices and remove any soil from the entrance at least once during the day and before leaving the work area.

o. No heavy equipment, including vehicles, shall operate within 10 feet of a flagged burrow and/or crevice.

p. If herbicides are used for removal of vegetation or to suppress regrowth that would pose a safety hazard, their use shall comply with the Stipulated Injunction concerning the type used and buffer for application away from water bodies and shall be rated for aquatic use by the California Department of Pesticide Regulation. Additionally, herbicide use shall require approval by the City and other responsible agencies prior to use. Herbicides shall not be broadcast sprayed or discharged to sensitive habitat areas, coastal waters, or wetlands. Herbicides shall not be used within an ESHA or ESHA buffer area where herbicides would affect an ESHA.

MM BIO-3 The following measures shall be implemented to minimize impacts to roosting bats:

a. If roosting bats are detected in the work area during the pre-activity survey or work activities, a no equipment/no activity buffer of 100 feet will be implemented around the roost unless a qualified biologist can assign a site-specific reduced buffer or limited activity buffer if the standard buffer would constrain the proposed activity.

b. Work shall be confined to the period between 1 hour after sunrise and 1 hour before sunset to minimize the potential for disturbance to foraging adults to maximum extent possible. During the two occurrences of night work, artificial lighting shall be the lowest illumination allowed for human safety, selectively placed, shielded, and directed downward to the maximum extent practicable to minimize effects to bats.

MM BIO-4 The following measures shall be implemented to minimize impacts to nesting birds:

a. If work is scheduled to occur during the nesting bird season (February 15 to August 31), a pre-activity survey for nesting birds shall be conducted no more than 14 days before the start of work, by a qualified biologist approved by the City. If work cannot be completed within 14 days of a survey, work areas shall be resurveyed. Survey results shall be conveyed to the project manager and to the City. If an active nest is found in vegetation to be removed, work will be postponed until the nest is no longer active. If an active nest is found in adjacent vegetation, a buffer will be established based on the species. The on-site biological monitor will observe the nest for signs of disturbance, and if necessary, stop work, and consult with a PG&E biologist and the City regarding next steps (e.g., stopping all work, increasing the buffer, etc.).

b. If an active bird nest is observed during work activities, all work shall cease in proximity to the nest and the on-site biological monitor shall contact a PG&E biologist and the City to determine next steps (e.g., stopping all work, increasing the buffer, etc.).

MM BIO-5 PG&E proposes to replace trees 12 inches or greater consistent with the City's Heritage Tree Ordinance (Section 7.40.060), including the blue gum eucalyptus, which is not considered a heritage tree under the ordinance (Section 7.40.020). As a result, PG&E shall plant 35 24-inch box trees at City-approved locations.

V. Cultural Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☒	☐
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☒	☐
(c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

Environmental Evaluation

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

As discussed above in response to CEQA question I.b in Aesthetics, the Spanish Town single family residence (located at 525 San Mateo Road), was constructed in 1905 and is included in the City's Historic Resource Inventory. This and other associated outbuildings that may also be of historic merit are located approximately 100 feet south of the ROW associated with the Southwest Work Area and would not be affected by the project. No known historical resources have been identified within the project work areas. The project has a low potential to impact historical resources given the scope of project activities and limited ground disturbance, which does not include grading, excavation, or construction activities. If a previously undiscovered historical resource is encountered during the project, all work in the immediate vicinity of the resource would be halted until a qualified professional can evaluate the significance of the find in accordance with the provisions of State CEQA Guidelines Section 15064.5 and PRC Section 21083.2. PG&E in consultation with the City, other applicable agencies, and a qualified professional would determine the appropriate measures, in accordance with State CEQA Guidelines Section 15064.5 and PRC Section 21083.2. Compliance with these mandatory regulatory compliance measures would ensure the project would not cause a substantial adverse change in the significance of a historical resource; therefore, impacts would be less than significant with mitigation.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

The City LCLUP indicates that the project site is a potentially sensitive archeological area.[40] However, the project has a low potential to impact archaeological resources given the scope of project activities and limited ground disturbance. In the event that an archeological resource is encountered during the project, all work in the immediate vicinity of the discovery would be halted until a qualified archaeologist can evaluate the significance of the find in accordance with the provisions of State CEQA Guidelines Section 15064.5 and PRC Section 21083.2. The archaeologist would complete any requirements for the mitigation of adverse effects on any resources determined to be significant, and PG&E, in consultation with the City and applicable agencies, would determine the appropriate avoidance measures or other

[40]City of Half Moon Bay. 1993. *Local Coastal Program Land Use Plan, Chapter 6: Archaeological and Paleontological Resources*, p. 228. Available at: https://www.half-moon-bay.ca.us/DocumentCenter/View/181/Chapter-6-Arch-PDF. Accessed June 7, 2019.

appropriate mitigation in consultation with a qualified archaeologist, in accordance with State CEQA Guidelines Section 15064.5 and PRC Section 21083.2. Compliance with these regulatory compliance measures would ensure the project would not cause a substantial adverse change in the significant of an archeological resource, and impacts would be less than significant.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Human remains are not expected to be encountered given the scope of project activities and limited ground disturbance, which does not include grading, excavation, or construction. If human remains or related resources are discovered, such resources would be treated in accordance with state and local regulations and guidelines for disclosure, recovery, relocation, and preservation, as appropriate, including State CEQA Guidelines Section 15064.5. If human remains are discovered, they would be evaluated by the County Coroner as to the nature of the remains. If the remains are determined to be of Native American origin, the Native American Heritage Commission would be contacted, a Most Likely Descendent would be identified, and State-mandated procedures would be complied with. Therefore, impacts would be less than significant.

VI. Energy

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
(b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The project involves vegetation maintenance activities along an existing ROW. No indirect energy consumption (energy used to produce raw materials that are subsequently consumed as part of the project) would occur. The project would result in direct energy consumption associated with the use of vegetation removal equipment and worker vehicle trips. However, energy use would be short term and temporary, lasting approximately 3 weeks. To reduce the potential for impacts to biological resources, much of the work would be performed using manual labor. This provides the added benefit of reducing energy use. Additionally, the project would implement MM AQ-2, which would require that idling times be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure 13 California Code of Regulations [CCR] Section 2485). Given the relatively short duration and limited scale of project activities, vegetation maintenance activities would not result in the wasteful, inefficient, or unnecessary consumption of energy resources; therefore, impacts would be less than significant.

Energy consumption during operation of the project would not change from existing vegetation management activities associated with the existing pipeline and would include vehicle trips to and from the work areas for maintenance activities and the use of gas-powered hand tools (e.g., weed whackers and chainsaws) to trim vegetation. These operational vegetation maintenance activities would continue to have no impact on the wasteful, inefficient, or unnecessary consumption of energy resources; therefore, impacts would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The project would be limited to vegetation maintenance activities along an existing ROW to protect the structural integrity of the existing natural gas pipeline. The project would not increase the capacity of the pipeline. As a result, the project would not involve architectural or engineering design elements that would be subject to state and local plans and policies regarding renewable energy or energy efficiency. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and no impact would occur.

VII. Geology and Soils

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
(ii) Strong seismic ground shaking?	☐	☐	☒	☐
(iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
(iv) Landslides?	☐	☐	☐	☒
(b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
(c) Be located on a 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?	☐	☐	☐	☒
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
(f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Environmental Evaluation

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

a-i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

The project consists of vegetation removal to protect the structural integrity of an existing natural gas pipeline. This would reduce the potential for a catastrophic pipeline failure during a seismic event and would not increase the potential for adverse effects associated with existing geologic conditions. The project is not located within a California Geological Survey fault zone. The project is located approximately 3 miles east, 2.3 mile west, and 3.5 mile west of the State of California-designated Alquist-Priolo Earthquake Fault Zone for the Seal Cove Fault, Pilarcitos Fault, and San Andreas Fault, respectively.[41] The project is limited to the removal of vegetation within the pipeline ROW and would only expose workers to adverse effects during a ground-shaking event during the 3-week work window or during ongoing operational vegetation maintenance activities, which would occur once every 2 to 3 years. Based on the distance to the active faults and the short window of work required for the project, the potential for fault-induced ground rupture across the project area that would result in loss, injury, or death is considered to be low and impacts would be less than significant.

a-ii) Strong seismic ground shaking?

The most likely sources of a large earthquake and seismic ground shaking include the San Andreas Fault. The purpose of the project is to protect the structural integrity of an existing natural gas pipeline by removing vegetation near the pipeline. Workers could be exposed to adverse effects during a ground-shaking event if it occurred during the 3-week work window or during operational vegetation maintenance activities that would occur once every 2 to 3 years. Workers would abide by existing regulations regarding worker safety. Protecting the pipeline structural integrity would be a beneficial effect that would reduce the potential for a catastrophic failure during a strong ground-shaking event. Impacts due to strong seismic ground shaking would be less than significant.

a-iii) Seismic-related ground failure, including liquefaction?

Vegetation removal would be in areas potentially subject to liquefaction during a ground-shaking event.[42] The purpose of the project is to protect the structural integrity of an existing natural gas pipeline by removing vegetation in close proximity to the pipeline. Tree stumps and roots would be left in place. In the event liquefaction occurs, the project would not be affected because it does not include structural development and would not affect soil composition or groundwater characteristics. Consequently, the project would not increase liquefaction potential. Risk to project workers would be limited to the 3-week work window or during ongoing operational vegetation maintenance activities that would occur once every 2 to 3 years. Workers would be expected to abide by existing regulations required for worker safety. Protecting the pipeline structural integrity would reduce the potential for a catastrophic failure and

[41] California Department of Conservation. 2015. Fault Activity Map of California. Available at: http://maps.conservation.ca.gov/cgs/fam/. Accessed June 6, 2019.

[42] County of San Mateo. n.d. Earthquake Liquefaction and Shaking Maps. Available at: https://planning.smcgov.org/documents/san-mateo-county-hazards-earthquake-liquefaction-shaking. Accessed June 6, 2019.

would be a beneficial effect. Impacts due to seismic-related ground failure, including liquefaction, would be less than significant.

a-iv) Landslides?

Portions of the project occur along a hillside that has the potential for landslides. However, the project does not include grading or structural development; tree stumps and roots would be left in place. Additionally, the vegetation proposed for removal is distributed within a heavily vegetated area and represents a small portion of the existing vegetation. The project would not include any actions that have the potential to create or exacerbate slope failure; therefore, there would be no impact.

b) Result in substantial soil erosion or the loss of topsoil?

The project consists of selective tree and brush removal. Tree stumps and roots would be left in place. Herbaceous vegetation would be allowed within 14 feet from the edge of the pipeline, thus providing cover over the soil. It does not include grading or development and most of the work would be performed using manual labor. Consequently, it would not result in substantial soil erosion or loss of topsoil. Additionally, the project would occur during a single 3-week period during the dry season, between June 1 and October 15, or during dry conditions if work cannot be avoided at this time. This would reduce the potential for erosion or the loss of topsoil, and impacts would be less than significant.

c) Be located on a 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?

The project would not be located on known unstable geologic units or soils. The project includes selective removal of vegetation to protect the integrity of an existing natural gas pipeline. No grading would occur, all tree stumps and roots would be left in place, and most of the work would be performed using manual labor. Consequently, vegetation removal would not cause landslides, lateral spreading, liquefaction, or collapse. The project does not include the extraction of groundwater and would not result in or contribute to subsidence; therefore, there would be no impact.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The project would not include the construction of any structures and would not be affected by expansive soils, and no impact would occur.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The project does not include the installation of septic tanks or wastewater disposal systems, and no impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Geologic units from a geological map of the County were analyzed for their potential paleontological sensitivity. Paleontological sensitivity is defined as the potential for a geological unit to produce scientifically significant fossils. In its *Standard Guidelines for the Assessment and Mitigation of Adverse*

Impacts to Non-renewable Paleontological Resources,[43] the Society of Vertebrate Paleontology defines four categories of paleontological sensitivity (potential) for Rock units: high, low, undetermined, and no potential. No records searches or field surveys were conducted as part of the paleontological review. The project traverses three distinct geologic units: Pleistocene age marine terrace deposits (QMT), upper Miocene and Pliocene age Purisma formation (Tp), and Holocene age younger alluvial fan deposits (QYF).[44] Of these geologic units covered, QMT and Tp have high sensitivity, and QYF has low-to-high sensitivity for paleontological resources.

The City LCLUP indicates that no paleontological resources of known significance have been identified in Half Moon Bay and they are extremely limited in the entire County Coastal Zone.[45] The project has the potential to impact paleontological resources if the work affects sensitive, previously undisturbed surficial sediment or sedimentary rock. Although portions of the project occur on geologic units with high sensitivity for paleontological resources, the potential for significant paleontological discovery and impact are anticipated to be low within the proposed work areas because the project does not include grading, excavation, or other significant earth-moving activity. In the unlikely event that a paleontological resource is discovered, PG&E would comply with PRC Division 5, Chapter 1.7, Section 5097.5, and Division 20, Chapter 3, Section 30244, which prohibit the removal, without permission, of any paleontological site or feature from lands under the jurisdiction of the state or any city, county, district, authority, or public corporation, or any agency thereof. As a result, project activities would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, and impacts would be less than significant.

VIII. Greenhouse Gas Emissions

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
(b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Evaluation

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The BAAQMD has not established GHG emissions thresholds of significance for this type of project or the equipment that would be used to remove vegetation.[46] GHG emissions are usually based on the

[43] Society of Vertebrate Paleontology (SVP). 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*. SVP Impact Mitigation Guidelines Revision Committee. Available at: http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx. Accessed June 7, 2019.

[44] U.S. Geological Survey (USGS). 1983. Geologic map of San Mateo County, California. Available at: https://ngmdb.usgs.gov/Prodesc/proddesc_49.htm. Accessed June 6, 2019.

[45] City of Half Moon Bay, 1993, *LCLUP Chapter 6,* p. 228.

[46] BAAQMD, 2017, CEQA Air Quality Guidelines, see footnote number 15.

increase in vehicle miles travelled (VMT), ongoing operations, and construction activities. In this case, the project would not cause an increase in population or an increase in VMT. The project does not include construction or enlargement of existing facilities. The project would require the use of equipment such as chainsaws, wood chippers, and worker vehicles that would temporarily generate GHG emissions. GHG emissions would be limited to the 3-week work duration and ongoing operational vegetation maintenance activities that would occur once every 2 or 3 years and would not change. Much of the work would be performed manually to reduce potential effects to biological resources. This has the added benefit of reducing the amount of equipment and vehicle emissions. The potential for significant GHG emissions is minimized by the limited duration and small scale of the project. Additionally, PG&E would implement MM AQ-2, which would minimize idling times for equipment and requires equipment to be maintained and properly tuned in accordance with manufacturer's specifications. It should also be noted that the vegetation removal is required to protect the structural integrity of the pipeline. This reduces the potential for a catastrophic wildland fire that could generate high levels of GHG and criteria pollutants. As a result, the project would not generate GHG emissions in quantities that would have a significant impact on the environment; therefore, impacts would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As previously described in Section III, Air Quality, the Final 2017 Clean Air Plan provides a framework for long-term planning efforts to reduce GHG to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.[47] The project would not cause an increase in population or VMT. The project would reduce the potential for pipeline failure that could result in a catastrophic wildland fire and associated GHG emissions. As a result, PG&E would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions; therefore, impacts would be less than significant.

IX. Hazards and Hazardous Materials

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
(b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

[47] BAAQMD, 2017, Clean Air Plan, see footnote number 12.

Environmental Issues		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
(f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
(g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☒	☐	☐

Environmental Evaluation

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The project would require the use of limited amounts of petroleum-based fuels or lubricants associated with equipment used during the project. Leaks of fuels or lubricants could create a hazard to the public or environment. Vehicles would typically be refueled off-site. Chainsaws and other equipment would potentially require refueling on site. As a result, PG&E would implement MM HAZ-1 and MM HAZ-2, which would require hazardous materials to be stored within watertight containers with appropriate secondary containment, limit equipment fueling to designated areas greater than 100 feet away from any water feature, and require regular equipment inspections for leaks. Cleanup kits would also be maintained on-site if a spill occurred, as required by MM HAZ-3. Spills would be cleaned with absorbents, and cleanup materials would be stored and disposed of in accordance with all applicable federal, state, and local requirements.

As described in Section IV, Biological Resources, the project may involve the use of herbicides for removal of vegetation or to suppress regrowth. The use of herbicides may create a significant hazard to the public or the environment. As a result, MM BIO-2 is provided to restrict the application methods and type of herbicides used.

With implementation of MM HAZ-1 through MM HAZ-3 and MM BIO-2, the project would not create a significant hazard to the public or environment as a result of the release of hazardous materials; therefore, impacts would be less than significant with mitigation.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

As noted in the previous section, the project would require the use of limited amounts of on-site petroleum-based fuels or lubricants associated with equipment used during the project. Leaks of fuels or lubricants could occur, which could create a hazard to the public or environment. However, implementation of HAZ MM-3 would minimize the potential for accidental spills; therefore, impacts would be less than significant with mitigation.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The Southwest Work Area associated with the project is located within 0.2 mile of Half Moon Bay High School. The project would require the use of equipment and vehicles that emit exhaust emissions that in high enough concentrations could be hazardous. However, as described in Section III, Air Quality, given the relatively short duration (3 weeks) and limited scale of project activities, the project would not generate substantial levels of hazardous air emissions. In addition, PG&E would implement MM AQ-1 and MM AQ-2, which would further reduce already less-than-significant hazardous emissions on sensitive receptors. As a result, impacts resulting from the emission of hazardous emissions would be less than significant.

The project would require and use hazardous materials (i.e., petroleum-based fuels or lubricants) associated with equipment used during the project. However, the potential for these materials to impact sensitive receptors associated with the school is negligible, given the scope of project activities. Further, MM HAZ-1 through MM HAZ-3 have been identified to require hazardous materials to be stored within watertight containers with appropriate secondary containment, limit equipment fueling to designated areas greater than 100 feet away from any water feature, and require regular equipment inspections for leaks and cleanup kits to be maintained on site if a spill occurred. With implementation of MM HAZ 1 through MM HAZ-3, impacts would be less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The project area is not located on or within the vicinity of a hazardous materials site list compiled pursuant to Government Code Section 65962.5 (Cortese List); therefore, no impacts would occur.[48]

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The project is not located within the Airport Land Use Plan area or within 2 miles of a public airport,[49] and no impact would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The purpose of the project is to protect the integrity of an existing natural gas pipeline by removing trees and woody brush in close proximity. This proactive approach reduces the potential need for activating an emergency response or evacuation plan should the integrity of the pipeline be threatened. Although traffic lanes along SR-92 would be temporarily shifted within the project vicinity to accommodate work in a short section of the project, these changes to traffic patterns would be temporary, occurring for 1 to 2 days during the 3-week work period. Temporary lane restrictions are subject to approval by Caltrans and

[48] California Department of Toxic Substances Control (DTSC). 2019. Hazardous Waste and Substances Site List. Available at: https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29. Accessed June 7, 2019.

[49] City/County Association of Governments of San Mateo County. 2014. Final Airport Land Use Compatibility Plan for the Environs of Half Moon Bay Airport. Available at: http://ccag.ca.gov/plansreportslibrary/airport-land-use/. Accessed June 7, 2019.

coordination with other agencies including the County Sherriff's Department. The project would not impair implementation of or physically interfere with an emergency response plan or emergency evacuation plan because no road closures are proposed or anticipated. As a result, the project would not conflict with an adopted emergency response plan or evacuation plan; therefore, impacts would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The purpose of the project is to protect the structural integrity of an existing natural gas pipeline. Consequently, the overall effect would be to reduce the potential for catastrophic fires. However, the project would temporarily introduce potential ignition sources that do not currently exist at the project site. Potential ignition sources include internal combustion engines associated with vehicles and hand operated tools that could cause sparks. To minimize the potential for vehicles or equipment to ignite a fire, PG&E would implement MM HAZ-4, which would require that fire protection controls be maintained on-site and that all internal combustion engines be equipped with spark arrestors. With implementation of MM HAZ-4, construction activities would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires; therefore, impacts would be less than significant with mitigation.

Mitigation Measures

MM HAZ-1 Hazardous liquids, wastes, and all chemicals stored at the staging area shall be stored in watertight containers with appropriate secondary containment to prevent any spillage or leakage or in a completely enclosed storage shed.

MM HAZ-2 Vehicle and equipment fueling and maintenance operations shall be conducted, off-site, or in designated areas only. No equipment refueling shall take place within 100 feet of any water feature. Crews shall inspect equipment for leaks regularly and make repairs immediately if leaks are detected. Spill kits shall be on hand to manage any unanticipated spills of materials from project equipment.

MM HAZ-3 Spill cleanup kits shall always be maintained on-site. If rain is forecast, cover the spill and contaminated areas prior to the onset of precipitation. Clean the spill with absorbents. Do not wash the spill with water. Store and dispose of cleanup materials, contaminated materials, and recovered spilled material in accordance with federal, state, and local requirements.

MM HAZ-4 Project personnel shall be directed to drive on areas that have been cleared of vegetation or on disturbed areas; park away from dry vegetation; and carry water, shovels, and fire extinguishers in times of high fire hazard. PG&E shall also prohibit trash burning. Spark arrestors should be installed on equipment using internal combustion engines. Additionally, fire-suppression materials and equipment shall be kept adjacent to work areas and shall be clearly marked.

X. Hydrology and Water Quality

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
(c) 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:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(iv) Impede or redirect flood flows?	☐	☐	☐	☒
(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☒	☐	☐
(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

Environmental Evaluation

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

A section of the project is located adjacent to Pilarcitos Creek, which drains to the Pacific Ocean. No grading or road construction is proposed. Tree stumps and roots would be left in place, reducing the potential for erosion. Limited amounts of potential water pollutants could be generated, including soil sediment and petroleum-based fuels or lubricants associated with equipment used during the project.

PG&E has proposed applying herbicides to the cut stumps to control future saplings that may recolonize the site. As described in Section IV, Biological Resources, in response to CEQA question a, herbicide use is subject to the Final Injunction and restricted in accordance with MM BIO-2. Herbicides would not be broadcast sprayed or discharged to sensitive habitat areas, coastal waters, or wetlands. Herbicides would not be used within an ESHA or ESHA buffer area where herbicides would affect an ESHA As such, if PG&E elects to use herbicides, herbicide use would require approval by the City and other responsible agencies prior to use, and the type used and buffer for application away from water bodies would comply with the Final Stipulated Injunction and would be rated for aquatic use by the California Department of

Pesticide Regulation and the USFWS approved BAHCP and ITP, per MM BIO-2. If this herbicide use is not permitted by the City or other resource agencies, ongoing maintenance activities would be performed using hand tools.

To mitigate any potential impacts to water quality standards or waste discharge requirements, PG&E would implement MM HYD-1 through MM HYD-3, which would restrict vegetation removal and fueling activities to areas away from the water feature, require standard sediment and erosion control, and ensure that no silt or hazardous material enters the watercourse during the project. In addition, PG&E would implement MM HAZ-1 and MM HAZ-2, which would require that hazardous materials (e.g., petroleum products such as oils, fuels, grease) be stored in watertight containers with appropriate secondary containment to prevent spillage or leakage that could enter Pilarcitos Creek and would restrict vehicle and equipment fueling off-site or within 100 feet of Pilarcitos Creek. Potential impacts would further be reduced by only conducting project activities outside of the wet season or during dry conditions. Therefore, the project would not violate any water quality standards or waste discharge requirements, and potential impacts would be less than significant with mitigation.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The project may include the use of a water truck (per MM AQ-1) if there is potential for the project to generate dust. Water would be sourced from a local municipal water purveyor with adequate capacity. The use of this water for dust control purposes would not deplete groundwater supplies and does not include any actions that would affect groundwater recharge; therefore, impacts would be less than significant.

c) 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:

c-i) Result in substantial erosion or siltation on- or off-site?

The proposed vegetation removal activities would not alter the existing drainage patterns within the project and would not result in the alteration of Pilarcitos Creek or any other water feature. Vegetation removal activities are not expected to result in the creation of substantial bare ground surface and do not involve the addition of impervious surfaces. Tree stumps and roots would be left in place. No grading or road construction is proposed. As a result, the project would not result in substantial erosion or siltation; therefore, impacts would be less than significant.

c-ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Project activities would be limited to vegetation removal within an existing ROW that would not alter existing drainage patterns. Vegetation removal activities are not expected to result in the creation of substantial bare ground surface and do not involve the addition of impervious surfaces. Tree stumps and roots would be left in place. As a result, the project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site; therefore, impacts would be less than significant.

c-iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The project would not result in the creation of substantial bare ground surface and does not involve the addition of impervious surfaces. As a result, the project would not create or contribute runoff water that would exceed the capacity of stormwater drainage systems or provide substantial additional sources of polluted runoff; therefore, impacts would be less than significant.

c-iv) Impede or redirect flood flows?

The project would not involve any grading or the construction of any structures that could impede or redirect flows, and no impact would occur.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The project is not located within a tsunami or seiche zone.[50] The eastern portion of the project, the Northeast Work Area, is located within flood Zone A, as depicted on a Federal Emergency Management Agency (FEMA) flood hazard map.[51] Flood Zone A is defined as an area that will be inundated by a flood having a one percent chance of being equaled or exceeded in any given year.[52] Portions of the Northeastern Work Area are also within a potential dam failure inundation area.[53] City documents indicate that dam failure flooding could extend 200 feet out from Pilarcitos Creek in some areas. The western portion of the project, the Southwest Work Area, is not within Flood Zone A and is approximately 400 feet from the creek at its closest point. The project would require the use of petroleum-based fuels or lubricants associated with equipment used during the project. The amounts involved are relatively small and would not be left on site beyond the active work period, projected to be 3 weeks for the initial work and up to 1 week every 2 or 3 years afterwards. In the event of a flood, during active work periods, there is limited potential for these pollutants to be discharged into the adjacent waterway. However, PG&E would implement MM HAZ-1, which would require that hazardous materials (e.g., petroleum products such as oils, fuels, grease) be stored in watertight containers with appropriate secondary containment to prevent spillage or leakage that could enter Pilarcitos Creek. In addition, the project would be conducted outside of the wet season or during dry conditions where risk of flood inundation is low. As a result, the risk of pollutants due to project inundation would be low; therefore, impacts would be less than significant with mitigation.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Project activities would be limited to vegetation removal within an existing ROW and would not substantially affect water quality or groundwater management. Tree stumps and roots would be left in place. PG&E would implement MM HYD-1 through MM HYD-3 and MM HAZ-2, which would restrict vegetation removal and fueling activities to areas away from water features, require standard sediment and erosion controls, and ensure that no silt or hazardous material enters the watercourse during the

[50] City of Half Moon Bay. 1993. *Local Coastal Program Land Use Plan, Chapter 4: Hazards*. Available at: https://www.half-moon-bay.ca.us/DocumentCenter/View/179/Chapter-4-Hazards-PDF. Accessed June 7, 2019.

[51] Federal Emergency Management Agency (FEMA). 2019. National Flood Hazard Layer FIRMette. Available at: https://p4.msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/nfhlprinttool2_gpserver/j71416b5b5d7d43d692d76c3bd7baa9e7/scratch/FIRMETTE_532e6f70-894d-11e9-915f-001b21bbe86d.pdf. Accessed June 7, 2019.

[52] FEMA. 2019. Flood Zones. Available at: https://www.fema.gov/flood-zones. Accessed June 7, 2019.

[53] 2018-2019 Draft Local Land Use Plan Update. 2018. Chapter 7, Natural Resources, Figure 7-5. Available at: https://www.planhmb.org/. Accessed September 5, 2019.

project. No groundwater pumping is proposed. As a result, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan; therefore, impacts would be less than significant with mitigation.

Mitigation Measures

MM HYD-1 No vegetation removal shall occur in or on the banks of Pilarcitos Creek or the cattail marsh/pond directly south of the Southwest Work Area.

MM HYD-2 Standard PG&E Best Management Practices for sediment and erosion control shall be implemented to prevent sedimentation into the waterway, as necessary.

MM HYD-3 All chipped or lopped vegetative material shall be distributed as approved by the City and per appropriate fire prevention standards. No chipped material shall be broadcast into water features or the banks thereof.

XI. Land Use and Planning

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Physically divide an established community?	☐	☐	☐	☒
(b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Physically divide an established community?

Project activities are limited to vegetation maintenance activities along an existing PG&E ROW. As a result, project activities would not physically divide an established community, and no impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project is located within the California Coastal Zone. The project was reviewed for consistency with policies relating to the LCLUP and the City Zoning Ordinance (Title 18).[54] The project was found to be consistent with City policies and development regulations. The project would not impede coastal access, contribute to shoreline erosion or bluff retreat, or otherwise conflict with any other environmental policy expressed in the LCLUP. Additionally, the project does not propose any new, expanded, or modified land use in the project area and would not conflict with the existing and surrounding uses. As a result, no impact would occur.

[54] City of Half Moon Bay. 1993. *Local Coastal Program and Land Use Plan, Chapter 9: Development*. Available at: https://www.half-moon-bay.ca.us/154/Local-Coastal-Program-Land-Use-Plan. Accessed June 10, 2019.

XII. Mineral Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
(b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The Division of Mines and Geology has prepared Mineral Land Classification Maps for aggregate resources. The maps designate four different types of resource sensitivities. The four sensitivity types are:

- Mineral Resource Zone (MRZ)-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood for their presence exists.
- MRZ-2: Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists.
- MRZ-3: Areas containing mineral deposits the significance of which cannot be evaluated from available data.
- MRZ-4: Areas where available information is inadequate for assignment of any other MRZ zone.

The project is located within lands designated MRZ-3 and is underlain by the Lompico Sandstone geologic units.[55] There is no active mining operation within this geologic unit within the Half Moon Bay Quadrangle. The geologic unit is likely suitable for fill only.[56] In any event, given the scope of project activities and limited ground disturbance, it is unlikely that the project would result in the loss of availability of valuable mineral resources, and impacts would be less than significant.

a) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The project consists of vegetation removal near an existing natural gas pipeline. For safety reasons, the project work areas are not suitable for mining. The project is not located within a locally important mineral resource recovery site, as delineated on the City General Plan or LCLUP. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site, and no impact would occur.

[55] California Department of Conservation Division of Mines and Geology. 1987. Mineral Land Classification Aggregate Materials in the San Francisco-Monterey Bar Area, Mineral Land Classification Map, SR-146 Plate 2.37.

[56] California Department of Conservation Division of Mines and Geology. 1987. Mineral Land Classification Aggregate Materials in the San Francisco-Monterey Bar Area, Special Report 146 Part II, pg 70.

XIII. Noise

Environmental Issues		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:					
(a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
(b)	Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
(c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Evaluation

Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Sensitive receptors in the project vicinity include a residence located directly north of the project's Northeast Work Area, Half Moon Bay High School located approximately 0.2 mile north of the project's Southwest Work Area, and Hilltop Mobile Home Park, located approximately 0.1 mile north of the project's Southwest Work Area. The most intensive project activity would occur in the central portion of the Northeast Work Area, which is northeast of the Spanish Town commercial area, high school, and mobile home park. Fewer trees would be removed from the westernmost and easternmost areas of this work area. However, there are three trees subject to removal 75 feet away from a single-family residence at the northeastern extent of this work area. A cluster of four trees at the westernmost area of the Southwest Work Area are within 150 feet of the nearest residence at the mobile home park. The use of equipment including chainsaws, chippers, and project vehicles would generate noise that could be noticeable to some of these sensitive receptors. However, the bulk of the noise generating activities would occur in an area that is relatively isolated and would be of limited duration.

The City has established restrictions limiting construction and similar noise generating activities to between the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday; 8:00 a.m. to 6:00 p.m. Saturdays; and 10:00 a.m. to 6:00 p.m. Sundays and holidays. The City Engineer may approve exceptions to these hours, if necessary, to facilitate the orderly completion of work and minimize disruption to the community. Except for two occurrences of night work, project activities would occur Monday through Friday within the allowable timeframe. The night work is proposed to alleviate potential traffic and safety concerns associated with work along SR-92. Noise associated with the use of equipment including chainsaws, chippers, and project vehicles would be temporary, lasting for the 3-week work duration. Given the nature of the project, temporary noise would not exceed established noise standards, and impacts would be less than significant.

The project would not generate stationary noise or operational noise in the long term, aside from the continuing occasional vegetation maintenance activities that would occur once every 2 to 3 years.

Operation of the project would not generate a substantial increase in permanent noise that would exceed established noise standards; therefore, impacts would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

The project does not include any actions that would generate vibrations or groundborne noise, and no impacts would occur.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project is not located within the vicinity of a private airstrip or an airport land use plan, and no impact would occur.

XIV. Population and Housing

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
(b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The project does not involve developing new housing or businesses or land use changes. Project crewmembers are expected to come from the local area or commute from neighboring counties and cities. The project would not require workers to relocate to the area. The project would not alter the location, distribution, density, or growth rate of the population and would not result in direct or indirect impacts to population growth, and no impact would occur.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project would not displace any people or housing and would not induce population growth or otherwise increase the demand for housing, necessitating the construction of replacement housing elsewhere, and no impact would occur.

XV. Public Services

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
(a) Fire protection?	☐	☐	☐	☒
(b) Police protection?	☐	☐	☐	☒
(c) Schools?	☐	☐	☐	☒
(d) Parks?	☐	☐	☐	☒
(e) Other public facilities?	☐	☐	☐	☒

Environmental Evaluation

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

The purpose of the project is to remove vegetation that could adversely affect the structural integrity of an existing natural gas pipeline and to reduce the potential for a catastrophic fire. Fire protection services in the City are provided by the Coastside Fire Protection District (CFPD), a CAL FIRE agency. The CFPD operates three fire stations, the closest of which, Fire Station 40, is located approximately 1.2 miles south of the project. Fire Station 40 is staffed with one fire captain and two fire apparatus engineers.[57] Fire Station 40 can provide a minimum response time of 2 minutes and maximum response time of 8 minutes to all portions of the City.[58]

The project would temporarily introduce potential ignition sources that do not currently exist at the project site. Potential ignition sources include internal combustion engines associated with vehicles and vegetation removal equipment. While the use of these ignition sources could increase the demand for fire protection services in the event they caused a wildfire, due to the limited nature and duration of proposed activities, the risk of wildfire is low and project construction activities would not result in the need for new or physically altered government facilities. Therefore, no impacts would occur.

Operation of the project would not increase population growth or otherwise increase the demand for fire protection services or result in the need for new of physically altered government facilities, and no impact would occur.

[57] Coastside Fire Protection. 2008. About us. Available at: http://www.coastsidefire.org/about./ Accessed June 10, 2018.

[58] City of Half Moon Bay. 1991. *City of Half Moon Bay General Plan, Safety Element*, p. 34. Available at: https://www.half-moon-bay.ca.us/DocumentCenter/View/185/1991-Safety-Element-of-General-Plan-PDF. Accessed June 10 2019.

b) Police protection?

Law enforcement services in the City are provided through a contract with the County Sheriff's office.[59] The closest substation to the project site is located approximately 0.5 mile southwest of the project. Given the duration and scope of project activities, the project would not increase the demand for police protection services, and no impact would occur.

c) Schools?

The project falls within the Cabrillo Unified School District. The closet school to the project site is Half Moon Bay High School, which is located approximately 0.2 mile north. The project would not directly or indirectly impact population growth or otherwise increase the number of students using school facilities, and no impact would occur.

d) Parks?

The closest park to the project is John L. Carter Memorial Park, which is located approximately 0.2 mile southwest of the project. The project would not directly or indirectly impact population growth or otherwise increase the number of individuals using recreational facilities, and no impact would occur.

e) Other public facilities?

The project is located approximately 0.6 mile southeast of Half Moon Bay Public Library and approximately 0.5 mile southeast of San Mateo Coastside Clinic. The project would not directly or indirectly impact population growth or otherwise increase the number of individuals using such facilities, and no impact would occur.

XVI. Recreation

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Would the project 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?	☐	☐	☐	☒
(b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Environmental Evaluation

a) Would the project 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?

The project is limited to vegetation removal and would not directly or indirectly increase population or housing. Workers are anticipated to come from the existing regional workforce and would not relocate. Therefore, the project would not create a new or increased demand for parks or recreational facilities in the City, and no impact would occur.

[59] City of Half Moon Bay. 2019. Law Enforcement. Available at: https://www.half-moon-bay.ca.us/211/Law-Enforcement. Accessed June 10, 2019.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project would not include recreational facilities or the expansion of existing facilities, and no impact would occur.

XVII. Transportation

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
(b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
(c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
(d) Result in inadequate emergency access?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Roadways and intersections are rated at varying levels of service (LOS). LOS is a measure of roadway operating conditions, ranging from LOS A, which represents the best range of operating conditions, to LOS F, which represents the worst. LOS can be estimated based on the average delay experienced by vehicles on the roadway. Access to the project work areas would be provided by SR-92. The segment of SR-92 between Main Street and R Road, a portion of which runs adjacent to the project site, is operating at LOS E during a.m. and p.m. hours. Policy 2-1 in the City General Plan Circulation Element established LOS C as the desired LOS on SR-92, except during the peak 2-hour commuting period and the 10-day average peak recreational hour when LOS E is acceptable.[60]

Project-generated traffic would include light duty trucks for crew transport and vegetation hauling, and transport trailers to haul construction equipment. Up to 20 workers would travel to the project each day and up to three haul trips would be required each day. As such, up to 23 one-way vehicle trips would be required each day during the 3-week work duration, for a total of 345 one-way vehicle trips. This increase in number of vehicle trips would not generate noticeable additional trips along SR-92 and would be limited to the 3-week work period. Based on the size and short-term nature of the project, the project would not degrade LOS on SR-92, nor conflict with a program plan, ordinance, or policy addressing the circulation system, and impacts would be less than significant.

[60] City of Half Moon Bay. 2013. *City of Half Moon Bay General Plan, Circulation Element*. Available at: https://www.half-moon-bay.ca.us/DocumentCenter/View/187/2013-Circulation-Element-PDF. Accessed June 11, 2019.

Operation of the project would not generate consistent additional vehicle trips on the existing road network, though long-term maintenance activities would continue to require additional trips once every 2 to 3 years to maintain cleared areas. These infrequent additional trips would not degrade LOS on SR-92 or conflict with a program plan, ordinance, or policy addressing the circulation system, and impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The project would result in temporary increases in vehicle miles traveled (VMT) associated with worker commutes and haul trips. Given the relatively short duration (3 weeks) and scale of the project, its effect on VMT would be minimal, especially when considered in the context of the over 7 million estimated VMT that occurred in the County in 2018.[61] As a result, the project would represent a temporary and imperceptible increase in VMT. Therefore, the project would not conflict with State CEQA Guidelines Section 15064.3(b), and impacts would be less than significant.

Operation of the project would not generate consistent additional VMT, though long-term maintenance activities would continue to require additional VMT once every 2 to 3 years to maintain cleared areas. This infrequent increase in VMT would be non-substantial and the project would not conflict with State CEQA Guidelines Section 15064.3(b), and impacts would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project does not include any structures or design features that would result in incompatible uses. Two occurrences of night work would be required to facilitate removal of a limited number of trees that would require crews to utilize a portion of the eastbound lane of SR-92. To accommodate vegetation removal activities during these occurrences, traffic lanes may be temporarily shifted along the portion of SR-92 adjacent to the project site or temporary lane closures may occur if there is insufficient room to shift traffic lanes. This is subject to approval of a traffic control plan by Caltrans, in consultation with the Highway Patrol and other agencies. Traffic control devices would be implemented to alert motorists to the construction work, per MM TRA-1. With implementation of MM TRA-1, the project would not substantially increase hazards due to a geometric design feature or incompatible use, and impacts would be less than significant with mitigation.

d) Result in inadequate emergency access?

The purpose of the project is to protect the structural integrity of an existing natural gas pipeline by removing nearby trees and woody brush. The project would reduce the potential for pipeline failure that could result in a catastrophic wildland fire, a beneficial effect for regional emergency response. Existing emergency access in the vicinity of the project could potentially be affected by up to two occurrences of night work that would require temporary modifications to SR-92 in the project area. The roadway would remain open during this event and emergency access would be maintained. Temporary traffic control activities are subject to approval by Caltrans and coordination with other public safety agencies. Consequently, project activities would not block any roads, and no impact would occur.

[61] County of San Mateo. 2016. San Mateo County Vehicle Miles Traveled (VMT) and Fuel Consumption 2011-2040. Available at: https://performance.smcgov.org/Environment/San-Mateo-County-Vehicle-Miles-Traveled-VMT-and-Fu/amhx-x8q8/about. Accessed June 11, 2019.

Mitigation Measures

MM TRA-1 Alteration of traffic lanes for temporary night work is subject to traffic control plan approval by Caltrans in consultation with other agencies. Traffic control devices and signage shall be used during night work to alert motorists of vegetation removal activities.

XVIII. Tribal Cultural Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
(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), or	☐	☐	☒	☐
(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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Environmental Evaluation

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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)?

A cultural resource records search was not conducted for the project because of the low potential to encounter tribal cultural resources given the scope of project activities and minimal ground disturbance. On previous occasions, the City has contacted tribes, on previous occasions, that have traditional and cultural ties to the region, as identified by the Native American Cultural Commission. To date, these tribes have not responded to these outreach efforts or requested formal notification from the City of proposed CEQA projects pursuant to PRC Section 21080.3.1. As a result, the City is not obligated to provide notification of the project, and the City has met its obligations under Assembly Bill 52.

If objects or artifacts that may be tribal cultural resources are encountered during the course of the project, all nearby activities would temporarily cease on the project site until the potential tribal cultural resources

are properly assessed pursuant to PRC Section 21074 (a)(2). Compliance with this regulatory compliance measure would ensure the project does cause a substantial adverse change in the significance of a tribal cultural resource, and impacts would be less than significant.

b) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

See response to Section XVIII(a), above.

XIX. Utilities and Service Systems

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
(b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
(c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
(d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
(e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The project would not result in a long-term demand for water resources or generate wastewater. In addition, it would not require or result in the construction of new water or wastewater treatment or storm water facilities, or expansion of electric power, natural gas, or telecommunications facilities. Therefore, no impact would occur.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The project may include the use of water trucks to implement dust suppression as necessary (MM AQ-1). This use would not result in a significant demand for water resources, and existing municipal supply is adequate for use during the 3-week project period; therefore, impacts would be less than significant.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Portable toilets would be used within the work areas or staging areas, and waste would be disposed of at a local wastewater treatment plant by the service provider. There would be no long-term generation of domestic waste. Therefore, impacts would be less than significant.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Waste generated by the project would be limited to refuse generated by employees and vegetative "spoils" that would be lopped or chipped and scattered within the ROW. One property owner, POST, has requested that vegetation materials not be left on their property. Additionally, current best practice is to dispose of diseased Monterey pines at a licensed green waste facility. This would be no more than 11 trees, a small proportion of the 79 trees proposed for removal. Trash, debris, and invasive plant material hauled off-site would be disposed of at the Ox Mountain Sanitary Landfill, which has a remaining capacity of approximately 20 million cubic yards as of April 2018.[62] As a result, impacts would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Disposal of waste would comply with all applicable regulations, and no impact would occur.

XX. Wildfire

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
(a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
(b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☒	☐	☐
(c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒

[62] CalRecycle. 2018. Application for Solid Waste Facility Permit and Waste Discharge Requirements. SWIS/WDID/Global ID Number 41-AA-0002.

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Environmental Evaluation

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The purpose of the project is to protect the structural integrity of an existing natural gas pipeline by removal of trees and woody vegetation in proximity. This would reduce the potential of a pipeline failure and catastrophic wildland fire. The project would not impair implementation of or physically interfere with an emergency response plan or emergency evacuation plan because no road closures are proposed or anticipated. Although traffic lanes along SR-92 would be temporarily shifted along a span of SR-92 adjacent to the project, these changes to traffic patterns would be short term and temporary, occurring for up to two evenings/nights during the 3-week work period. The temporary disruptions to the traffic lanes would be subject to approval by Caltrans. As a result, the project would not conflict with an adopted emergency response plan or evacuation plan, and impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The purpose of the project is to protect the structural integrity of an existing natural gas pipeline, thus reducing the potential for a catastrophic fire. The project falls within a Local Responsibility Area. The Southwest Work Area is located adjacent to a Very High Fire Hazard Severity Zone (VHFHSZ), and the Northeast Work Area is located within a VHFHSZ. The project lies within the zone of the prevailing westerlies, meaning that winds blow out of the west/northwest for much of the year. These characteristics could influence wildfire behavior if activities sparked a wildfire. Therefore, PG&E would implement MM HAZ-4, which would require that fire protection controls be maintained on-site and that all internal combustion engines be equipped with spark arrestors. These measures would mitigate wildfire risks during construction activities, and the effect on wildfire risks would be less than significant with mitigation.

c) Require the installation or maintenance of associated infrastructipaure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The project does not involve the installation or maintenance of associated infrastructure, and no impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The project lies adjacent to the Pilarcitos Creek. Portions of the project occur along a hillside, and residential communities lie downstream of the project that could be potentially impacted by flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. However, the project would not alter the existing topographic conditions on-site, change existing drainage patterns, or add impervious surfaces. While the removal of trees could affect the integrity of the hillside, the trees' root systems would still be intact following their removal. Additionally, the trees slated for removal represent a relatively small fraction of the total number of trees within the project area. As such, the numerous trees not slated for removal would continue to provide hillside and erosion protection. Therefore, the project would not substantially change the existing conditions on-site that would expose people or structures to downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. As a result, impacts would be less than significant.

XXI. Mandatory Findings of Significance

Environmental Issues		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
(b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
(c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Environmental Evaluation

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Section IV, Biological Resources, and Section V, Cultural Resources, discuss the existing resources in the project area and conclude that the project would result in less-than-significant impacts to all biological and cultural resources (with implementation of mitigation measures for biological resources). Based on the discussions in these sections, the project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal

community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Therefore, impacts would be less than significant with mitigation.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Consistent with the State CEQA Guidelines (Section 15065), a project could have a significant cumulative impact if the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of present projects, and the effects of probable future projects. Cumulative impacts can result from individually minor, but collectively significant, effects occurring over a period of time. The proposed project would result in less-than-significant impacts in all resource areas with implementation of mitigation measures.

The proposed project is located within a rural area of the City, and numerous other development projects are proposed within 1 mile of the project. Because the proposed project would not increase pipeline capacity, induce population growth, or result in permanent increases in VMT, the proposed project would not combine with the other development projects to cumulatively affect any environmental resources. Various transportation projects are proposed within 1 mile of the project. However, these consist of vehicle, pedestrian, and bicycle safety improvements that would not increase road capacity. No other past, present, or reasonably foreseeable future projects are proposed within 1 mile of the project that could combine with the proposed project to result in cumulatively significant impacts. As a result, the proposed project would not result in a cumulatively considerable effect to any environmental resource or the environment.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The purpose of the project is to protect the structural integrity of an existing natural gas pipeline. This would reduce the potential for a catastrophic fire that could cause substantial adverse effects on humans. With the implementation of mitigation measures, there are no significant environmental impacts resulting from the proposed project, and no substantial adverse effects on human beings, directly or indirectly, would result during project implementation. Therefore, impacts would be less than significant with mitigation.

3 LIST OF PREPARERS

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APPENDIX A

Biological Technical Study

Biological Technical Study

PG&E Community Pipeline Safety Initiative Projects
RW-V-2196-15 and
RW-V-2198-15

Half Moon Bay, California

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November 14, 2018

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1 Introduction

This report was prepared to support an application for a Coastal Development Permit (CDP), for the PG&E Community Pipeline Safety Initiative (CPSI) projects RW-V-2196-15 and RW-V-2198-15. PG&E is seeking this permit to perform vegetation maintenance (e.g., removing trees and brush) to improve emergency access and to address safety concerns within PG&E's existing right-of-way (ROW) that contain high-pressure natural gas transmission pipelines. These projects are located on the south side of State Route (SR) 92, approximately 0.42 mile east of the intersection of SR-92 (San Mateo Road) and SR-1 in Half Moon Bay, California (Figure 1).

1.1 Project Description

PG&E proposes to remove select woody vegetation and trees up to 14 feet from the outer edge of the pipeline with consent from the property owners. The trees and brush may be replaced at a safe distance (e.g., greater than 14 feet) from the outer edge of the gas pipeline. The proposed project sites are located at the following locations:

- Project site RW-V-2198-15 is located on the south side of SR-92 alignment, from the Hilltop Mobile Home Park to approximately 1,000 feet east.
- Project site RW-V-2196-15 is located on the south side of SR-92 alignment, including approximately 1,400 feet between the Spanish Town shops and east toward R Road.

PG&E proposes to remove 70 trees and 100 brush units from RW-V-2196-15[1], and 11 trees and 15 brush units (or 540 sq. ft. of brush) from RW-V-2198-15[2]. Originally there were 12 trees proposed for removal at RW-V-2198-15, but during the site visit for this project, one tree appeared to have been removed by others, along with nearby brush, as part of a roadway repair for SR-92.

The crew will manage vegetation in specified areas manually using chainsaws and truck-towed chippers, and similar equipment. Vegetation may be cut to no more than 6 inches above ground level. Where work is located adjacent to or within an environmentally sensitive habitat area (ESHA), as defined by the City of Half Moon Bay Local Coastal Program (LCP), work will occur with hand tools only (e.g., chainsaw, loppers) and vegetation will be hauled to a designated location to be chipped. Once vegetation is removed, work will be performed on an as-needed basis.

[1] The number of trees and brush removals has changed since the coastal development permit application was submitted August 1, 2017, due to on-going negotiations with the property owner. Per Table 1 of the application, 84 trees were proposed for removal and zero brush units and now there are currently 70 trees and 100 brush units proposed for removal.

[2] Originally there were 12 trees proposed for removal at RW-V-2198-15, but during the site visit for this project, one tree appeared to have been removed by others, along with nearby brush, as part of a roadway repair for SR-92.

The following sections describe existing biotic communities and discuss sensitive habitats and potential special-status wildlife species occurring in the study areas (see below for a definition of 'study area').

2 Methods

Prior to conducting the reconnaissance-level field survey in the project sites, Stantec reviewed existing information on biotic resources in the study areas and surrounding areas. The following sources were reviewed:

- California Department of Fish and Wildlife (CDFW) BIOS Natural Diversity Database (CNDDB; CDFW 2018a);
- California Department of Fish and Wildlife RareFind 5 Natural Diversity Database (CNDDB; CDFW 2018b);
- U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC; USFWS 2018); and
- California Native Plant Society (CNPS) online version of the Inventory of Rare and Endangered Plants of California (CNPS 2018), and
- Half Moon Bay Municipal Code, Coastal Resource Areas, Sensitive Habitat, Section 18.38.020.

A list of special-status wildlife species with potential to occur in the study areas was compiled by performing a CNDDB search and reviewing the USFWS IPaC species list within the surrounding geographic area. The CNDDB search consisted of a 2-mile buffer around the project sites and included the Half Moon Bay U.S. Geological Survey (USGS) quadrangle. The USFWS IPaC was queried for plant and animal species with a 2-mile search radius from the project sites, and the CNPS query of the Half Moon Bay quadrangle. Botanical nomenclature follows the Jepson eFlora; vegetation communities were determined with reference to the Manual of California Vegetation (CNPS 2018).

Reconnaissance-level surveys were conducted at the two project sites by a Stantec biologist, Andrew Sorci, on March 8 and August 28, 2018. Stantec senior biologist, Jason Minton, provided oversight of the survey.

The purpose of the surveys were to:

1) identify the plant communities present within the study area, and classify those communities in accordance with the Manual of California Vegetation (CNPS 2018),

2) observe if existing conditions may provide suitable habitat for special-status plant and wildlife species (Figure 2a and Figure 2b),

3) identify aquatic features on-site, including Ordinary High Water Mark (OHWM)following guidance consistent with the US Army Corps of Engineers (USACE

1987, 2008), and the physical top of bank, which is relevant to regulations of the California Fish and Game Code Section 1600, and,

4) observe features that may meet the requirements to be considered Coastal Resource Areas under the California Coastal Act Section 30116, and ESHA as described by the Half Moon Bay Municipal Code Section 18.38.020.

The study areas included the project sites and the proposed vegetation to be removed, and a 200-foot wide buffer around these areas; thus, the study areas are larger than the area where vegetation is proposed to be removed. The biologist surveyed the study areas on foot, where possible, and surveyed areas on adjacent parcels with binoculars. Some areas of the 200-foot buffer were divided from the project area by State Route 92 (SR-92), and those areas were described only by visual assessment from publicly-accessible roadways. The boundary of the riparian area of Pilarcitos Creek, the OHWM and the top of bank were mapped using a Trimble GPS unit.

The likelihood of a species to occur within the project area was evaluated based on known distribution (range) and habitat requirements of each species assessed (such as, substrate, hydrology, vegetation community, and disturbance factors). The following general guidelines were used to assign an expected likelihood that any given species would occur:

- **Low:** Habitat within the study area and/or project vicinity would provide very few of the species' requirements for foraging, breeding, migration or refuge, and/or the known range of the species does not overlap with the study area.
- **Moderate:** Habitat within the vicinity of the project area is considered suitable to provide some of the species' requirements for foraging, breeding, migration or refuge, and known locations for the species are found near the study areas.
- **High:** Habitat within the vicinity of the project area is considered suitable to provide all requirements for foraging, breeding, migration or refuge, and known locations for the species are found within dispersal distance to the project area.

3 Results

3.1 Vegetation and Other Land Cover Types

3.1.1 ARROYO WILLOW THICKET

The arroyo willow thicket is a riparian vegetation type associated with Pilarcitos Creek, a perennial stream, and occurs only in project site RW-V-2196-15. The arroyo willow thicket (CNPS 2018) is a woodland dominated by mature trees ranging from 20-40 feet tall. The composition includes green alders (*Alnus viridis*), gray alders (*Alnus incana*), and willows (*Salix* spp.). The understory is comprised of blackberry (*Rubus* spp.), cape ivy (*Delairea odorata*), stinging nettle (*Urtica dioica*), bigleaf periwinkle (*Vinca major*), and annual bromes (*Bromus* spp.) and wild oats (*Avena* spp.; Photos 1 and 2).

The arroyo willow thicket meets the definition of an ESHA by its proximity to Pilarcitos Creek, and by its composition of riparian tree species, including 50% or more of arroyo willow.

Riparian communities provide high-value habitat for wildlife. These communities offer diverse microhabitats created by the layering of trees, shrubs, herbs, and aquatic vegetation, as well as access to streams for drinking and foraging. Riparian zones provide important nesting habitat for birds, offer cover and refuge sites for amphibians, reptiles and small mammals, and serve as important movement corridors for wildlife. Riparian communities also enhance the value of adjacent upland habitats by providing water, foraging resources, and thermal refuges. Bird species found in riparian communities include Cooper's hawk (*Accipiter cooperi*), great horned owl (*Bubo virginianus*), Wilson's warbler (*Wilsonia pusilla*), song sparrow (*Melospiza melodia*), and many other songbirds. Common mammals found in these habitats include opossum (*Didelphis virginianus*), raccoon (*Procyon lotor*), mule deer (*Odocoileus hemionus*), and deer mouse (*Peromyscus maniculatus*). Riparian vegetation can also provide beneficial shading and instream cover for fishes and other aquatic species.

There are no trees proposed for removal from arroyo willow thicket.

3.1.2 EUCALYPTUS WOODLAND

The eucalyptus woodland present in the study areas for RW-V-2196-15 and RW-V-2198-15 is comprised primarily of mature blue gum eucalyptus (*Eucalyptus globulus*) ranging in height from 25-140 feet in the overstory, and blackwood acacia (*Acacia melanoxylon*), blackberry, and poison oak (*Toxicodendron diversilobum*) making up the shrub layer. The herbaceous layer is comprised primarily of cape ivy, black mustard (*Brassica nigra*), galium (*Galium* sp.), scattered pampas grass (*Cortaderia solloana*), and annual bromes and wild oats (Photo 3). This woodland conforms to *Eucalyptus* spp. - *Ailanthus altissima - Robinia pseudoacacia* Woodland Semi-Natural Alliance as described by the CNPS (2018).

The eucalyptus woodland meets the definition of an ESHA because it has a potential to be utilized by raptors for nesting or by monarch butterflies (*Danaus plexippus*) for seasonal roosting. Per the 1993 LCP, eucalyptus trees themselves are considered to be a "…particularly undesirable, invasive…" species. Subsequent updates to the LCP (2014) have recognized that a eucalyptus woodland may be considered ESHA under the LCP, if it provides suitable habitat for rare or endangered species. Per the *2014 Plan Half Moon Bay: Report on Existing Conditions, Trends and Opportunities Assessment* eucalyptus forests can be considered ESHA due to their potential to provide roosting/nesting habitat for avian species (particularly raptors) and roosting habitat for monarch butterflies. During the reconnaissance surveys, no raptor nests were observed.

Eucalyptus woodlands can provide habitat for wildlife, particularly for large birds like raptors, whose nests can be supported by eucalyptus trees. This habitat provides perching, roosting and nest sites for a variety of other bird species, and roosting habitat for monarch butterflies. Eucalyptus trees' tendency to deposit leaf litter may create micro-habitats for small vertebrate species including small mammals and northwestern alligator lizards (*Elgaria coerulea principis*), gopher snakes (*Pituophis catenifer* spp.) and

woodrats. These habitats are however often heterogeneous and the volatile terpenes which they excrete may reduce the diversity of understory vegetation and trees species able to grow in these eucalyptus woodlands. Additionally, allelochemicals persisting in the soil have been shown to interfere with recruitment and establishment of native species (Watson 2000). This heterogeneity may also limit the species diversity of wildlife inhabiting these forests.

The project at RW-V-2196-15 proposes to remove 59 trees (primarily eucalyptus) from within eucalyptus woodlands and a number of brush units.

3.1.3 CATTAIL MARSH (POND)

There is an irrigation pond located 30 feet south of RW-V-2198-15. Cattail (*Typha* sp.) was the dominant species within the pond, and around the margins plant cover included willow and annual grasses, which conforms to the cattail marsh vegetation community as described by the CNPS (2018).

Ponds and other still water bodies serve as habitats for amphibians such as Pacific tree frog (*Pseudacris regilla*) and bullfrog (*Rana catesbeiana*), reptiles such as western pond turtle (*Actinemys marmorata*), and a variety of water birds. Aquatic features such as ponds also provide an important source of water and refuge sites for many terrestrial wildlife species.

No trees are proposed for removal from cattail marsh.

3.1.4 HIMALAYAN BLACKBERRY SCRUB (RUDERAL)

There is a small strip of treeless ruderal vegetation at RW-V-2196-15, between the arroyo willow thicket and San Mateo Road, including a maintained trail (Photo 4) and steep slope adjacent to SR-92. This area is dominated by cape ivy, Himalayan blackberry, and stinging nettle. The ruderal vegetation community is most closely represented by the category of Himalayan blackberry scrub (CNPS 2018).

Ruderal areas provide relatively low habitat value for wildlife because they are generally degraded communities dominated by non-native, weedy plants. These areas typically provide low-quality foraging habitat for birds and small mammals but can provide marginal habitat for some species depending on the type and amount of vegetation present. Common birds found in ruderal habitat include Brewer's blackbird (*Euphagus cyanocephalus*) and mourning dove (*Zenaida macroura*). Common reptiles such as western fence lizard (*Sceloporus occidentalis*) may use ruderal areas such as roadsides and railroad berms for thermal basking.

The project at RW-V-2196-15 proposes to remove 7 trees.

3.1.5 AGRICULTURAL

There are three parcels containing agricultural operations within 200 feet of the project sites. Open grasslands supporting sheep grazing occur to the southeast of RW-V-2196-15. There is also an agricultural operation growing corn and pumpkins to the north of RW-V-2196-15; however, as of March 2018, the field was completely covered in black

mustard. There is also an agricultural parcel on the north side of State Route 92, within RW-V-2198-15. Aerial imagery of this parcel shows that in the past this parcel was an unknown farmed crop, however during the site visit in March 2018 it consisted entirely of non-native grassland. Aerial imagery from May 2018 shows that this parcel has since been plowed and graded.

Agricultural lands include irrigated crop fields, dry-farmed fields and pastures for sheep grazing found within the study area. Typical species found in agricultural land include red-tailed hawk (*Buteo jamaicensis)*, American crow (*Corvus brachyrhynchos*), Brewer's blackbird, western meadowlark (*Sturnella neglecta*), house finch (*Haemorhous mexicanus*), red-winged blackbird (*Agelaius phoeniceus*), California ground squirrel (*Otospermophilus beecheyi*) and deer mouse (*Peromyscus maniculatus)*. Pastures are used by a variety of wildlife depending on the geographic area and types of adjacent habitat. The pastureland found in the study area provides suitable foraging and nesting habitat for some animals, particularly birds.

No trees are proposed for removal from agricultural landcover.

3.1.6 DEVELOPED/LANDSCAPED

Both project sites are adjacent to State Route 92 (San Mateo Road). There are two mobile home parks located to the west and northwest of RW-V-2198-15. There is also a commercial home-and-garden center immediately to the east of RW-V-2198-15. A paved walking trail runs adjacent to RWV-2198-15 (Photo 6), on the south side of San Mateo Road, and on either side of the trail are a series of planted Monterey cypress (*Cupressus macrocarpa*). There is a residence, at 651 San Mateo Road, located in the northern portion of RW-V-2196-15.

Developed areas, particularly residential developments and areas with landscaped vegetation, can provide moderate habitat value for wildlife. The planting and maintenance of shrubs, trees, ornamental plants and lawns in residential areas and parks enhances this habitat for animal species that can coexist with humans. Examples of these species include house finch, European starlings (*Sturnus vulgaris*), Brewer's blackbird, Anna's hummingbird (*Calypte anna*), raccoon, striped skunk (*Mephitis*), opossum, and the occasional gray fox (*Urocyon cinereoargenteus*). Additionally, human-built structures such as buildings, bridges and overpasses can provide shelter or roosting sites for species such as cliff swallow (*Petrochelidon pyrrhonota*), barn swallow (*Hirundo rustica*), rock pigeon (*Columba livia*), and small mammals such as mice, non-native rats, and a variety of bats. Other urban wildlife includes striped skunk, opossum, and occasional gray foxes.

The project at RW-V-2198-15 proposes to remove 9 trees from developed/landscaped landcover, and RW-V-2196-15 proposes to remove 4 trees.

3.1.7 WILD OATS GRASSLAND

RW-V-2198-15 runs along the northern boundary of a non-native annual grassland (Photo 5) that is characteristic of a wild oats grassland (CNPS 2018). A review of aerial imagery shows that this area has been used as some sort of agricultural operation in the past, but not in the past few years. This area is dominated by annual grasses, including

slender oat (*Avena barbata*), ripgut brome, and mustard (*Brassica* sp.). There are several small Monterey pines (*Pinus radiata*) and an irrigation pond in the southwest portion of this area. This fallow agricultural area has developed a community of non-native annual grasses that most closely represented by the category of wild oats grassland (CNPS 2018).

Non-native grasslands support a variety of small mammals and provide important foraging habitat for raptors and other bird species. Birds commonly found in non-native grasslands include red-tailed hawk, American kestrel (*Falco sparverius*), western meadowlark, and Brewer's blackbird. Common mammals include brush rabbit (*Sylvilagus bachmani*), California ground squirrel and Botta's pocket gopher (*Thomomys bottae*). Rodent burrows in grassland habitats may also provide essential upland refuge sites for some species of amphibians and reptiles.

The project at RW-V-2198-15 proposes to remove 2 trees from wild oat grasslands.

3.1.8 CALIFORNIA SAGEBRUSH SCRUB

The California sagebrush scrub (CNPS 2018) habitat runs along the northeastern boundary of RW-V-2198-15, on the north side of State Route 92. There is also a small section of this scrub habitat in the northernmost portion of RW-V-2196-15, also on the northside of State Route 92. This habitat is within the 200-foot buffer but is outside of the projects impact area and will not be accessed through or worked in. The primary species observed were California sagebrush (*Artemisia californica*) and Coyote bush (*Baccharis pilularis*).

California sagebrush scrub habitat may provide habitat for brush rabbit, ground squirrels, deer mice, and rats. This habitat may also provide habitat for various species of sparrows, warblers, and bushtit (*Psaltriparus minimus*), as well as foraging habitat for hawks such as red-tailed hawk and Cooper's hawk.

No trees are proposed for removal from California sagebrush scrub landcover.

3.1.9 MONTEREY PINE FOREST

The Monterey pine forest (CNPS 2018) habitat runs along the north side of State Route 92. This habitat is within the 200-foot buffer but is outside of the projects impact area and will not be accessed through or worked in. This habitat consisted of a mix of Monterey pine (*Pinus radiata*) and blue gum eucalyptus. Monterey pine is a closed-cone pine, which provides high value habitat to wildlife for feeding and cover. This forest type provides potentially suitable habitat for red-tailed hawk, sharp-shinned hawks (*Accipiter striatus*), and great horned owl. This habitat may also provide habitat for brush rabbit, striped skunk, opossum and mice.

No trees are proposed for removal from Monterey pine forest landcover.

3.2 Special-Status Plant Species

A list of special-status plant species for evaluation within the study areas was compiled by conducting a search of the CNDDB for a 2-mile buffer surrounding the study areas,

reviewing the USFWS IPaC with a 2-mile search radius, and a query of the CNPS database for the Half Moon Bay quadrangle. Figure 3 depicts the CNDDB plant occurrences within 2 miles of the study areas. Special-status plant species are discussed below.

Special-status plant species were defined in accordance with the CEQA Guidelines, Section 15380, and the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009), and includes species that are:

- Federally or State-listed, or proposed for listing, as rare, threatened or endangered (CDFW 2018a);
- Special Plant as defined by the CNDDB (CDFW 2018b, CDFW 2018c); or
- Listed by CNPS in the online version of its Inventory of Rare and Endangered Plants of California (CNPS 2018).
- In addition, unique species identified in the Half Moon Bay Local Coastal Program (City of Half Moon Bay 2011), including wild strawberry and its habitat, were included because of that local designation.

A list of special-status plant species is presented in Table 1: *Special-Status Plant Species Evaluated for a Potential to Occur Within the Project Areas*. Based on findings from the CNDDB, the USFWS, the CNPS, and those species listed as rare and endangered in the Half Moon Bay Municipal Code (Section 18.38.085), 10 special-status plants were evaluated for their potential to occur within the study areas. Of these 10 species, none were found to have greater than a low potential to occur. The low potential to occur is primarily due to an absence of suitable habitat types to support the coastal scrub, dune and chaparral species that were identified as occurring regionally. The specific observations and rationale for each evaluation are presented in Table 1.

Table 1. Special-status Plant Species evaluated for a potential to occur within Project Areas.

Scientific Name	Common Name	Status[1] (Federal, State, CNPS)	Blooming Period	Communities	Elevation (ft.)	Potential to Occur in the Study Areas
Arabis blepharophylla	coast rockcress	4.3, HMBMC	Feb-May	• Rocky areas • Coastal bluff scrub • Coastal prairie	10-3300	**Low potential to occur.** There is no coastal scrub or prairie habitat in the project areas. The species and its habitat were not observed during the March 2018 site visit.
Arctostaphylos montaraensis	Montara manzanita	1B.2, HMBMC	January-March	• Chaparral • Northern coastal scrub	120-1800	**Low potential to occur.** No suitable habitat occurs in the project areas. The species and its habitat were not observed during the March 2018 site visit.
Erysimum franciscanum	San Francisco wallflower	4.2, HMBMC	March-June	• Coastal strand • Valley grassland • Northern coastal scrub	10-2550	**Low potential to occur.** No suitable habitat in the project areas. The species and its habitat were not observed during the March 2018 site visit.

Table 1. Special-status Plant Species evaluated for a potential to occur within Project Areas.

Scientific Name	Common Name	Status[1] (Federal, State, CNPS)	Blooming Period	Communities	Elevation (ft.)	Potential to Occur in the Study Areas
Horkelia cuneata var. *sericea*	Kellogg's horkelia	1B.1	April-September	• Dunes • Coastal sandhills • Coastal sage scrub	3-10260	**Low potential to occur.** Known to occur 1.4 miles north of RW-V-2196-15, within sage scrub habitat. Nearest suitable habitat for this species is in the coastal sage scrub communities on the north side of San Mateo Road. The species and its habitat were not observed during the March 2018 site visit.
Lasthenia californica ssp. *macrantha*	perennial goldfields	1B.2, HMBMC	January-November	•Northern coastal scrub •Grassland •Dunes along immediate coast	20-2474	**Low potential to occur.** There are nine CNDDB occurrences 1-1.5 miles west, southwest of RW-V-2198-15, all within coastal dune habitat. Marginal habitat may occur within the open grassland to the south of RW-V-2198-15; however, as this parcel has historically been disturbed, this species is not expected to occur. The species and its habitat were not observed during the March 2018 site visit.

Table 1. Special-status Plant Species evaluated for a potential to occur within Project Areas.

Scientific Name	Common Name	Status[1] (Federal, State, CNPS)	Blooming Period	Communities	Elevation (ft.)	Potential to Occur in the Study Areas
Perideridia gairdneri	Gairdner's yampah	4.2, HMBMC	June-October	• Broadleafed upland forest • Chaparral • Coastal prairie • Valley and foothill grassland • Vernal pools	0-1850	**Low potential to occur.** No CNDDB records or CNPS records in San Mateo County, and no suitable habitat present in the project areas. The species and its habitat were not observed during the March 2018 site visit.
Plagiobothrys chorisianus var. *chorisianus*	Choris' popcornflower	1B.2	March-June	• Grassy, wet meadows • Coastal prairie • Chaparral • Northern coastal scrub	6-1040	**Low potential to occur.** This species is known to occur 1 mile southwest of RW-V-2198-15, and 0.9 mile southeast of RW-V-2196-15. The species and its habitat were not observed during the March 2018 site visit.
Potentilla hickmanii	Hickman's cinquefoil	1B.1	April-August	• Northern coastal scrub • Closed-cone pine forest • Freshwater wetlands • Wetland-riparian	75-550	**Low potential to occur.** Suitable habitat may occur around Pilarcitos Creek. However, this species is only known from several very small colonies in San Mateo County, the nearest being 6.5 miles northwest of the project areas. The species and its habitat were not observed during the March 2018 site visit.

Table 1. Special-status Plant Species evaluated for a potential to occur within Project Areas.

Scientific Name	Common Name	Status[1] (Federal, State, CNPS)	Blooming Period	Communities	Elevation (ft.)	Potential to Occur in the Study Areas
Silene verecunda	Delores' campion	1B.2, HMBMC	March-June	• Coastal prairie • Chaparral • Northern coastal scrub • Valley grassland	26-12500	**Low potential to occur.** No suitable habitat is present in the project areas. The species and its habitat were not observed during the March 2018 site visit.
Fragaria chiloensis	Beach strawberry	HMBMC	February-March	• Coastal Strand • Northern Coastal Scrub	-125-2056	**Low potential to occur.** No suitable habitat is present in the project areas. The species and its habitat were not observed during the March 2018 site visit.

Notes:

[1]. Conservation status definitions are as follows:

CNPS designations:

- 1A Species presumed extinct in California
- 1B Plants rare, threatened or endangered in California and elsewhere
- 2 Plants rare, threatened or endangered in California, but more common elsewhere
- 4 Plants of limited distribution – a watch list

CNPS threat categories:

- .1 Seriously endangered in California
- .2 Fairly endangered in California
- .3 Not very endangered in California.

Half Moon Bay Municipal Code:

- HMBMC Listed as Rare and Endangered under Section 18.38.085 of the Half Moon Bay Municipal Code

3.3 Wetland and Aquatic Resources

RW-V-2196-15 is located adjacent to Pilarcitos Creek, however the current scope of work vegetation removal avoids all areas below the OHWM, top of bank, or within the riparian corridor. Vegetation present within the riparian corridor are described above in Section 3.1, and habitat present may provide habitat for several special-status species, discussed in further detail in Section 6. At the time of the March 2018 site visit, there was water moving through the channel, with a width ranging from 4 to 8 feet and approximately 3-6 inches in depth (Photo 7). During the August 2018 site visit in which the creek was delineated, the ordinary high-water mark measured an average of 8 feet in width, and the top of bank measured an average of 23 feet. Water depth ranged from 4-12 inches.

There is an irrigation pond approximately 30 feet south of RW-V-2198-15, likely this pond was historically used as a source of water for the adjacent agricultural operations (Photo 8). The biologist was not able to access the site on foot but surveyed the pond and vicinity with binoculars. Suitable habitat is present for California red-legged frog (CRLF) and San Francisco gartersnake (SFGS; Section 6).

3.4 Special-Status Wildlife Species

Special-status wildlife species were defined in accordance with the CEQA Guidelines, Section 15380, and included species that are:

- Listed, proposed for listing, or candidates for listing as threatened or endangered under the federal Endangered Species Act;
- Listed or candidates for listing as threatened or endangered under the California Endangered Species Act;
- Designated as Species of Special Concern (SSC) by the CDFW;
- Included on the CDFW "Special Animals List" (CDFW 2017); or otherwise meet the definition of rare, threatened, or endangered, as described in the CEQA Guidelines, Section 15380.
- In addition, unique species identified in the Half Moon Bay Local Coastal Program, including wild strawberry and its habitat, were included because of that local designation.

Special-status wildlife species documented or with suitable habitat in the study areas or vicinity are summarized in Table 2. Pilarcitos Creek is designated as critical habitat for steelhead – Central Coast Distinct Population Segment (CCC DPS)(San Mateo Hydrologic Unit; Figure 3). Critical habitat for CRLF is 0.12 mile east and 0.04 mile north of RW-V-2196-15 (critical habitat Unit SNM-1) (Figure 3). Critical habitat for western

snowy plover is 1.1 miles west of RW-V-2198-15 (critical habitat Unit CA 16, Half Moon Bay) (Figure 3).

Table 2. Special-status wildlife species evaluated for a potential to occur within the Project Areas.

Scientific Name	Common Name	Status1 Federal, State	Habitat Requirements	Potential to Occur in the Study Areas
Invertebrates				
Callophrys mossii bayensis	San Bruno elfin butterfly	FE, HMBMC	This species inhabits rocky outcrops and cliffs in coastal scrub, in the San Francisco Peninsula, and is dependent on their host plant, stonecrop (*Sedum spathulifolium*).	**No potential to occur.** The larval host plant, stonecrop, was not observed on site during the March 2018 site visits and that plant species is unlikely to occur because there is no coastal scrub habitat in the project areas.
Coelus globosus	globose dune beetle	HMBMC	Inhabitant of coastal sand dune habitat, from Bodega Head in Sonoma County south to Ensenada, Mexico. Inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.	**No potential to occur.** No dune habitat present in the project areas.
Grapholita edwardsiana	San Francisco tree lupine moth	HMBMC	The larval host plant of this species, Lupine arboreus, occurs on sandy soils along the coastline from Del Norte County south to Ventura County.	**No potential to occur.** No tree lupines (or any lupine species) were observed during the March site visit.

Scientific Name	Common Name	Status1 Federal, State	Habitat Requirements	Potential to Occur in the Study Areas
Fish				
Eucyclogobius newberryi	tidewater goby	FE	Found in brackish water in shallow lagoons and in lower stream reaches. Typically breed in sandy substrates, but can be found in rocky, mud, and silt substrates as well.	**Low potential to occur.** Current range is north of the Bay Area. The project areas are considered too far upstream from suitable brackish-water habitat. The species is unlikely to occur because the project areas are outside the current extant range of the species, and the distance from the tidal reach is further than typically suitable.
Hypomesus transpacificus	Delta smelt	FT	Generally found in brackish waters. Shallow, slightly brackish sloughs and edgewaters with good water quality are used for spawning.	**No potential to occur.** Projects are outside of the known range and there is no suitable habitat present.
Oncorhynchus mykiss irideus	steelhead – Central Coast DPS	FT	Freshwater spawning sites with water quantity and quality conditions and substrate supporting spawning, incubation and larval development. Natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.	**Moderate potential to occur.** Suitable spawning habitat occurs upstream of the project areas in Pilarcitos Creek and migrating fish could be present whenever the water level is high enough at any time throughout the year; there is no suitable breeding habitat and a lack of woody debris as cover in the section of the creek that runs through the project site at RW-V-2196-15.

Scientific Name	Common Name	Status1 Federal, State	Habitat Requirements	Potential to Occur in the Study Areas
Amphibians				
Rana draytonii	California red-legged frog	FT, SSC	Breeds in ponds and pools in slow-moving streams with emergent vegetation; adjacent upland habitats are often used for temporary refuges or dispersal movements.	**High potential to occur.** Suitable aquatic habitat found in Pilarcitos Creek, as well as breeding habitat in nearby ponds and refuge habitat in nearby uplands. There are five CNDDB occurrences within 2 miles of the project sites. Projects are within 0.1 mile of occupied Critical Habitat.
Reptiles				
Chelonia mydas	green sea turtle	FT	Generally found in shallow waters, inside reefs, bays, and inlets, and are attracted to areas with an abundance of marine grass and algae.	**No potential to occur.** There is no suitable marine habitat in the project areas.
Actinemys marmorata	Western pond turtle	SSC	Occurs in both permanent and seasonal waters, including marshes, streams, rivers, ponds and lakes. Also found in irrigation canals and agricultural drains. They favor habitats with large amounts of emergent logs or boulders, where they aggregate to bask.	**High potential to occur.** The project will be removing trees in areas that are accessible to turtles that may inhabit Pilarcitos Creek, and areas of soft soils may provide suitable nesting substrate, particularly in wild oat grassland and agricultural land covers.

Scientific Name	Common Name	Status1 Federal, State	Habitat Requirements	Potential to Occur in the Study Areas
Thamnophis sirtalis tetrataenia	San Francisco gartersnake	FE, SE, SFP	Found in densely vegetated ponds near open hillsides where they can sun themselves, feed, and find cover in small mammal burrows. They can also use temporary ponds and other seasonal freshwater bodies. They use emergent backside vegetation including cattails, bulrushes, and spike rushes for cover. Females give live birth from June through September, and coastal snakes may hibernate during winter in burrows in upland areas.	**High potential to occur.** Suitable aquatic habitat is present in Pilarcitos Creek, and upland hibernation areas are abundant along the creek corridor, including within the project area. There are two CNDDB occurrences within two miles of the project sites.
Birds				
Brachyramphus marmoratus	marbled murrelet	FT	This species is found primarily in nearshore marine waters, and fly inland to nest in large, mature conifers. Marbled murrelets feed primarily on fish and invertebrates.	**Low potential to occur.** There are no mature conifer trees in the project areas that would provide suitable nesting habitat.
Charadrius alexandrinus nivosus	western snowy plover	FT, SSC	This species nests in flat open areas with sand or saline substrates where vegetation is sparse or absent.	**Low potential to occur.** There is no suitable nesting or foraging beach habitat within the project areas. CNDDB record and Critical habitat occur 1.1 miles west of the project areas.

Scientific Name	Common Name	Status1 Federal, State	Habitat Requirements	Potential to Occur in the Study Areas
Geothlypis trichas sinuosa	saltmarsh common yellowthroat	SSC	Known to occur in the tidal marsh system of the southern San Francisco Bay but it is also known to occur in coastal riparian and wetland areas in San Mateo County. Nests are placed on or within 8 centimeters of the ground and may be over water, in emergent aquatic vegetation, dense shrubs, or other dense growth.	**High potential to occur**. There is suitable nesting habitat in Pilarcitos Creek. There two CNDDB within 2 miles of the study areas.
Laterallus jamaicensis coturniculus	California black rail	ST, SFP, HMBMC	Habitat includes salt marshes, freshwater marshes, and wet meadows. Most California populations are non-migratory, and use tidal areas with dense cover to provide protection.	**Not expected to occur**. No suitable marsh or wet meadow habitat is present at the project sites.
Pelecanus occidentalis californicus	California brown pelican	DFE, DSE, HMBMC	Typically found in estuarine, marine subtidal, and marine pelagic waters along California coast. Feeds almost entirely on fish, and nests on low, brushy slopes of undisturbed islands.	**No potential to occur.** No suitable marine, or tidal habitat for nesting or foraging present in the project areas.
Phoebastria (=Diomedea) albatrus	short-tailed albatross	FE	This species nests on isolated, windswept islands, and forages in open marine habitat, with the most important prey being squids, crustaceans, and fish.	**No potential to occur.** There is no suitable marine habitat present.

Scientific Name	Common Name	Status1 Federal, State	Habitat Requirements	Potential to Occur in the Study Areas
Sterna antillarum browni	California least tern	FE, HMBMC	This species nests in colonies, typically on relatively open beaches, free of vegetation (due to tidal action). Their simple nests consist of a scrape in the sand or shell fragments. Least terns forage near ocean waters and in shallow estuaries or lagoons.	**No potential to occur.** There are no known colonies within two miles of the project areas, and there is no suitable beach or marine habitat present.
Mammals				
Antrozous pallidus	pallid bat	SCC	Open, dry habitats such as grasslands, shrublands, and woodlands with rocky areas for roosting. Also known to forage over orchards and vineyards. Roosts in anthropogenic structures (buildings and bridges), cliff crevices of rock faces, and hollow trees.	**Moderate potential to occur.** Potential roosting habitat in tree hollows along the Pilarcitos Creek riparian corridor. Large trees with cavities or hollows could provide suitable day roosting for this species. Nearest CNDDB occurrences are 7.5 miles northeast and east of the project area.
Arctocephalus townsendi	Guadalupe fur seal	FE, ST, HMBMC	Breed on Isla de Guadalupe off the coast of Mexico, occasionally found on San Miguel, San Nicolas, and San Clemente islands. Prefers shallow, nearshore island water with cool and sheltered rocky areas for haul-outs.	**No potential to occur.** There is no suitable marine habitat present in the project areas.

Scientific Name	Common Name	Status1 Federal, State	Habitat Requirements	Potential to Occur in the Study Areas
Corynorhinus townsendii	Townsend's big-eared bat	SCC	Found in a variety of habitats throughout most of California. Roosts in caves, mines, tunnels, buildings, or other man-made structures. Feeds on insects on brush or trees or forages along habitat edges. This species requires hibernacula that remain above freezing and is very sensitive to human disturbances.	**Low potential to occur.** Marginal roosting habitat present in various buildings adjacent to the project area. Foraging habitat present along the Pilarcitos Creek riparian corridor.
Enhydra lutris nereis	sea otter	FT, SFP, HMBMC	Nearshore marine environments from about Año Nuevo, San Mateo County to Point Sal, Santa Barbara County. Needs canopies of giant kelp and bull kelp for rafting and feeding. Prefers rocky substrates with abundant invertebrates.	**No potential to occur.** No suitable marine habitat present in the project areas.
Lasiurus blossevillii	western red bat	SSC	Widely distributed throughout California. Roosts primarily in trees, 2 to 40 feet high. Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests. Forages over a wide variety of habitats including grasslands, open woodlands and forests, and croplands. Generally, prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging	**Moderate potential to occur.** Suitable roosting habitat along the Pilarcitos Creek riparian corridor. Suitable foraging habitat present in the study area and vicinity.

Scientific Name	Common Name	Status1 Federal, State	Habitat Requirements	Potential to Occur in the Study Areas
Neotoma fuscipes annectens	San Francisco dusky-footed woodrat	SSC	This species is found in forest and chaparral habitats of moderate canopy and moderate to dense understory.	**Low potential to occur.** RW-V-2196-15 may contain dense enough cover at the northern and southern extents that this species would be considered to have a high potential to occur, however, woodrat nests, which are readily identifiable when present, were not observed during the March 2018 site visit.

Notes:

DPS = distinct population segment;

[1]. Status designations:

Federal

- FE Listed as Endangered under the federal Endangered Species Act
- FT Listed as Threatened under the federal Endangered Species Act
- DFE Delisted as Endangered under the federal Endangered Species Act

Half Moon Bay Municipal Code

- HMBMC Listed as Rare and Endangered under Section 18.38.085 of the Half Moon Bay Municipal Code

State of California

- SE California Fish and Game Code Endangered Species
- SFP California Fish and Game Code Fully Protected Species
- SSC California Fish and Wildlife Species of Special Concern
- ST California Fish and Game Code Threatened Species
- DSE Delisted as California Fish and Game Code Endangered Species

3.4.1 SPECIES WITH A POTENTIAL TO OCCUR IN THE PROJECT AREAS

3.4.1.1 Steelhead – Central California Coast DPS

The CCC DPS of steelhead is listed as federally threatened. Critical habitat for the CCC steelhead DPS was designated on May 5, 1999 and revised Sept 5, 2005 (National Marine Fisheries Service [NMFS] 2005). Their range is defined by NMFS as all naturally spawned populations from the Russian River south to Aptos Creek in Santa Cruz County, including drainages of San Francisco, San Pablo, and Suisun Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers. Steelhead employ a variety of life history strategies that take advantage of the diversity of river systems and regional conditions to which they are adapted. Adults migrate from their marine environment to freshwater systems, and these migrations can be hundreds of miles. Deep, low-velocity pools are important wintering habitat, and spawning habitat consists of gravel substrates free from excessive silt (NMFS 2016).

The study area is within the historic and current range of steelhead. The section of Pilarcitos Creek in the study area is within critical habitat for this species. The nearest CNDDB record, from 1979, is in Frenchmans Creek, approximately 1.3 miles north of RW-V-2196-15. While the section in the study does not contain suitable rearing habitat, there may be suitable breeding habitat farther up Pilarcitos Creek, and migrating fish could be present whenever the water level is high enough at any time throughout the year. For the reasons described above, the potential for steelhead to occur in the study area for RW-V-2196-15 is proposed to be moderate at any time of year when water levels are adequate to support the species.

3.4.1.2 California red-legged frog

The CRLF was federally listed as a threatened species on May 23, 1996 (USFWS 1996). Revised critical habitat for this species was designated by USFWS on March 17, 2010 (USFWS 2010). It is also a California SSC. CRLF breed primarily in ponds but may also use slow moving streams or deep pools in seasonal streams for breeding. Ideal ponds have a mix of deep sections for escaping from predators and shallow sections which warm quickly and help the maturation of tadpoles and juveniles (USFWS 2002). Some emergent vegetation or shoreline vegetation such as cattails, bulrushes, or willows is also required for attachment of egg masses (USFWS 2002). Introduced species such as bullfrogs (*Lithobates catesbeianus*), largemouth bass (*Micropterus salmoides*), common carp (*Cyprinus carpio*), and mosquitofish (*Gambusia affinis*) may prey upon one or more life stages (eggs, tadpoles, or adults) of CRLF (Stebbins and McGinnis 2012). Radio tagged individuals have been found as far as two miles from suitable aquatic breeding habitat (USFWS 2002), and the species may aestivate in small mammal burrows in uplands, or may spend non-breeding time during the summer or winter in other aquatic habitats that are not otherwise suitable for breeding.

The project areas are within the historic and current range of CRLF (USFWS 2002). They are also within the boundary of the Central Coast Recovery Unit, based on the core area maps provided in the California Red-legged Frog Recovery Plan (USFWS 2002). The proposed project is located outside of CRLF critical habitat, but critical habitat unit SNM-1 (San Mateo) is located approximately 0.1 mile from RW-V-2196-15 (USFWS 2010). A review of the CNDDB shows five occurrences of CRLF to the north and west of the study areas, four of which occur within intermittent or perennial streams, and the last occurrence within coastal scrub habitat along the Half Moon Bay Coastal Trail. The nearest record, from 2006, is of an adult observed in the Pilarcitos Creek corridor, approximately 0.5 mile west of RW-V-2198-15. While there are only five CNDDB occurrences for CRLF within two miles from the project sites, there are several permanent ponds 0.07 and 0.1-mile northeast of RW-V-2196-15, and 30 feet southwest of RW-V-2198-15 which appear to have generally suitable breeding habitat and are adjacent to the Pilarcitos Creek corridor. Arroyo willow thicket, positioned as the riparian vegetation at RW-V-2196-15, is suitable as refuge habitat at any season of the year. The eucalyptus woodland is not optimum as refuge habitat because of the oils associated with that tree species, but the debris and ground cover may still provide suitable refuge habitat that may be occupied at any time of the year. For the reasons described above, the potential for CRLF to occur in the study areas is proposed to be high.

3.4.1.3 San Francisco gartersnake

The SFGS is listed as a Federal and State endangered species (Department of the Interior 1967). It is currently distributed throughout San Mateo County and northern Santa Cruz County (USFWS 2006). The SFGS is one of twelve subspecies of *Thamnophis sirtalis*, the most widely distributed snake in North America (Behler 1988; Janzen et. al. 2002). The SFGS can generally be distinguished by the presence of a lateral red longitudinal stripe bordered by black on both sides, whereas the California red-sided gartersnake has reddish bars which break up the black lateral coloration (Stebbins and McGinnis 2012). SFGS are typically found near aquatic habitats including ponds, creeks, canals, and freshwater marshes that support breeding populations of their primary prey, CRLF and Pacific treefrogs (*Pseudacris regilla*; USFWS 2006). Birds, such as hawks and herons, domesticated cats and other small mammals, adult bullfrogs, and even other snakes are considered predators of this species.

SFGS are primarily active above ground from early March to July during mating, with females giving live birth from June through September. Feeding activities and movements may continue into the fall months. During the winter, SFGS are known to retreat to upland hibernacula which include rodent burrows and dense mats of grass, but may be found basking outside these winter hibernacula during warm days (Larsen 1994). These important upland hibernacula are often found on south-facing slopes that support grassland and coastal scrub (USFWS 2006). Within suitable aquatic habitat,

SFGS are known to move 1.33 miles (2.1 km) over 111 days and 1.05 miles (1.7 km) over 74 days (Wharton 1989). Larsen (1994) documented snakes moving a maximum distance of 0.4 miles (671 meters) at the West of Bayshore site near the San Francisco International Airport. SFGS at Año Nuevo State Reserve and Pearson Ranch remained within 323 to 656 feet (100-200 meters) of pond foraging habitats and upland sites (McGinnis 2002, in USFWS 2006).

There are two CNDDB occurrences within 2 miles of the project sites. The nearest occurrence, from 2004, is approximately 0.35 mile southwest of RW-V-2198-15; one adult was observed in a weedy field adjacent to the Pilarcitos Creek riparian corridor. While no CRLF, an important prey species for SFGS, were observed during the March 2018 site visit, there is suitable habitat for this species (and other frog species) along the Pilarcitos Creek riparian corridor and nearby perennial ponds. In general, SFGS are known to inhabit the lower reaches of Pilarcitos Creek, and they are a mobile species within suitable habitat corridors like Pilarcitos Creek. Arroyo willow thicket and Himalayan blackberry scrub, positioned in proximity to Pilarcitos Creek at RW-V-2196-15, are suitable as habitats for foraging or as a refuge at any season of the year. The eucalyptus woodland is not optimum as a habitat to provide refuge because of the canopy cover that shades the ground (limiting basking locations in direct sun during winter), but the debris and ground cover is apt to provide suitable refuge habitat that may be occupied nonetheless. For the reasons described above, the potential for SFGS to occur in the study areas is considered to be high.

3.4.1.4 Western pond turtle

Western pond turtle is a California Species of Special Concern. Their range is throughout California, from southern coastal California and the Central Valley, north to the Cascade and eastern Sierra Nevada mountain ranges. Western pond turtles occur in a variety of permanent and intermittent aquatic habitats, such as ponds, marshes, rivers, streams, and ephemeral pools. They require slack or slow water habitat for feeding as well as suitable dry habitat such as rocks or fallen logs for basking and hauling out. In addition to appropriate aquatic habitat, these turtles require an upland nesting site in the vicinity of the aquatic habitat, often within 200 meters (656 feet). Nests are typically dug in grassy, open fields with soils that are high in clay or silt, and which are in direct sunlight to provide warmth for incubation of the eggs. Egg-laying usually takes place between March and August (Jennings and Hayes 1994). There is suitable aquatic habitat for western pond turtle in Pilarcitos Creek as well as the irrigation pond located 30 feet south of RW-V-2198-15. There may also be suitable upland habitat for western pond turtle particularly in the wild oat grassland or agricultural landcover where areas of soft soils may provide suitable nesting substrate. The potential for western pond turtle to occur in the project area is proposed as high because of the proximity of occurrence records, and the presence of suitable upland breeding habitat and aquatic habitat within proximity of the project area.

3.4.1.5 Saltmarsh common yellowthroat

Saltmarsh common yellowthroat is listed as a California SSC. The current breeding range for this species stretches from western Marin County down to San Mateo County, where breeding habitat consists of the coastal riparian and wetland areas (Shuford and Gardali 2008). Common yellowthroats occur year-round in their breeding range. Nesting habitat includes woody swamp, brackish marsh, and freshwater marsh, with the majority (about 65-percent) occupying either brackish or salt marsh systems (Shuford and Gardali 2008). Common yellowthroats build open cup nests, that are well concealed near the ground, in herbaceous vegetation. The diet of saltmarsh common yellowthroat consists mostly of insects and spiders. This species has been susceptible to non-native predators, and cowbird parasitism has been cited as reducing reproductive success (Shuford and Gardali 2008).

There are two CNDDB occurrences, both from 1990, within 2 miles of the project areas. The nearest record is approximately 1 mile north west, near the mouth of Pilarcitos Creek as it drains into the ocean. Suitable habitat is present the project areas, including the arroyo willow thicket along the Pilarcitos Creek, and in the Himalayan blackberry scrub. There is a high potential for this species to occur in the project sites as a nesting species, because breeding is common in suitable habitat within San Mateo County.

Roosting bats

Bats are widespread within California and may be found in any habitat. They are nocturnal aerial predators of insects and other arthropods, and often forage over open water, marshes, and other moist, open areas where flying insects tend to congregate. Different bat species have different roosting requirements and roosts can be found in a variety of habitats and locations. Day roosts, used from sunrise to sunset, provide a protected and sheltered location for bats to rest and sleep within a short flight to foraging areas and a site to raise their young (Erickson et al. 2002). During the day, bats may use three types of roosts: crevices, cavities, and foliage, and this selection may be species-specific. Crevice and cavity roosts may be found in natural and human-made features such as caves, cliffs, rock outcrops, trees, mines, buildings, bridges, and tunnels.

Night roosts, which are used from approximately sunset to sunrise, are primarily sites where animals congregate to rest and digest their food between foraging bouts (Erickson et al. 2002). Night roosts are often located in more open but protected areas such as overhangs on buildings and recessed areas on the undersides of bridges where warm air is trapped, and the concrete and steel thermo-regulate and retain heat better.

Two special-status bat species, western red bat and pallid bat have the potential to occur within the project area based on range, habitat, and roosting preference. Both of these species have been found to roost in tree foliage, hollows or cavities. While

there are no recorded occurrences for these species within a 2-mile buffer of the project area, bats in general may be under-reported to the CNDDB relative to their actual abundance in the environment. This may be in part because they are nocturnal, difficult to detect, and difficult to positively identify and count when detected. Therefore, the potential for these two species of roosting bat within the project area is considered to be moderate.

4 Sensitive Resource Assessment

4.1 Sensitive Biological Communities

4.1.1 PILARCITOS CREEK AND RIPARIAN CORRIDOR ESHA

Pilarcitos Creek and its associated riparian corridor, which is defined by the arroyo willow scrub landcover, have characteristic vegetation that meets the definition of a Riparian Area and Corridor ESHA defined by the Municipal Code Section 18.38.020. Those characteristics include bordering a perennial stream and containing fifty percent or greater vegetative cover by arroyo willow. Project site RW-V-2196-15 is located partially within the riparian corridor ESHA, although no trees are proposed for removal in that ESHA. RW-V-2198-15 is not located within an area that meets the definition for that ESHA.

PG&E is not proposing to remove trees from the ESHA at project RW-V-2196-15. There is an existing trail that parallels the northern edge of the riparian corridor, and all tree removals are proposed to occur north of that trail, and outside of the ESHA and the arroyo willow scrub. The northwestern bank of Pilarcitos Creek, including the OHWM, the top of bank and the arroyo willow scrub will be avoided. Trees are proposed for removal within the Himalayan blackberry scrub, the eucalyptus woodland, and developed/landscaped landcovers that abut the ESHA defined by the arroyo willow thicket (Figure 2b).

There are no tree removals within the ESHA, and thus there is no potential for reduction in shading or water temperatures to increase in Pilarcitos Creek due to the project.

Since no trees are proposed for removal within the ESHA, there is no anticipated impact to that ESHA.

4.1.2 EUCALYPTUS WOODLAND ESHA

The location and extent of the eucalyptus woodland habitat, which is defined as an ESHA, within the project area is shown in Figure 2b. PG&E proposes to remove 59 trees from this area as part of project RW-V-2196-15. No trees will be removed from the eucalyptus forest mapped within the project RW-V-2198-15.

The 59 trees (primarily eucalyptus) slated for removal within the eucalyptus woodland habitat at the RW-V-2196-15 project area, as shown in Figure 2b, may provide suitable nesting habitat for avian species. No raptor nests were observed during the reconnaissance surveys. The removal of these trees has the potential for direct impact

through the removal of active nests or disturbance which could cause nest abandonment. However, PG&E will implement appropriate avoidance and minimization measures (AMMs) to reduce the potential for impacts to actively nesting birds within the project area (see Section 5.4). Additionally, the forested habitat outside of the project area supports large swaths of eucalyptus habitat. Within 2 miles of the work area there is approximately 735 acres of eucalyptus stands available as potential nesting or roosting habitat. Overall, the removal of 59 trees (primarily eucalyptus) will be a minimal reduction of potential nesting habitat in this greater landscape. The removal of these trees accounts for a removal of approximately 0.3 acres of available eucalyptus nesting or roosting habitat.

Monarch butterflies are not currently listed as special status species under federal and state legislation nor are they listed as rare and endangered under Section 18.38.085 of the Half Moon Bay Municipal Code. As such monarch butterfly were not evaluated in this report as a species with potential to occur within the project area. Per the 2017 Update to the LCP "…no colonies of monarch butterfly were observed within the Planning Area." (City of Half Moon Bay, 2014). Additionally, a recent study by Griffiths and Villablanca (2015) has shown that monarchs require tree-species diversity particularly mixed -species stands containing conifer species, and do not preferentially select eucalyptus-only stands. This study suggests that monarchs may preferentially cluster and overwinter on conifers if given the choice (Griffiths and Villablanca 2015). Furthermore, there are significant patches of eucalyptus habitat outside of the project area (approximately 735 acres within a 2-mile radius) and as with nesting birds, the removal of 59 trees (primarily eucalyptus) from the project area will be a minimal impact to the potential eucalyptus habitat in this landscape.

When considered at a landscape level, as described above, the tree removals within the eucalyptus forest ESHA are relatively limited. The particular eucalyptus woodland within the project area is not known to have any record of use by monarch butterflies as a roost, and for those two reasons the work is proposed to have no impact to eucalyptus forest ESHA.

4.2 Perennial Creek Buffer Zone

Extending from the riparian vegetation by 50 feet, a perennial creek buffer zone is designated as a planning tool by the City of Half Moon Bay. Therefore, the area within 50 feet of the riparian corridor, which is mapped within RW-V-2196-15 as a mix of landcover types including arroyo willow thicket, Himalayan blackberry scrub and eucalyptus woodland (Figure 2b) falls within this designation of a perennial creek buffer zone. Nine trees are proposed for removal in this zone, in a linear pathway within 5 feet of the pipeline alignment.

Regarding the allowable activities within perennial creek buffer zones, the Plan Half Moon Bay (Addendum 3, April 2016) provides a performance standard stating that vegetation removal be limited to the minimum necessary to achieve project goals. Per regulation, "timbering" is allowed in perennial creek buffer zones. Further, certain activities such as maintenance and emergency repairs may necessitate reduced buffer widths. Maintaining a clearance around PG&E's natural gas transmission pipelines is a necessary maintenance activity that is an acceptable activity within the

perennial creek buffer. This maintenance activity is required in order to maintain safety standards around the pipeline alignment.

The tree removal for maintenance of an existing pipeline appears to be compatible with performance standards and with allowable activities, and so the removal of 9 trees is proposed to have no impact to the perennial creek buffer.

4.3 Heritage Trees

Section 7.40 of the Half Moon Bay municipal code describes the role heritage trees play in the City of Half Moon Bay. Heritage trees, as they pertain to the proposed projects, are defined as follows, "A tree located on public or private property, exclusive of eucalyptus, with a trunk diameter of twelve inches or more, or a circumference of at least thirty-eight inches measured at forty-eight inches above ground level (City of Half Moon Bay 2011)." Five trees proposed for removal conform to the description of a heritage tree, being a species other than eucalyptus, with a diameter-at-breast height (DBH) greater than twelve inches in diameter (refer to Table 3).

Table 3. Heritage trees proposed for removal

Number	Unique Identifier	Species	Diameter at breast height (DBH; inches)	Tree Height (feet)
1	PT2198_1547	Cypress, Monterey	12	20
2	PT2198_15114	Cypress, Monterey	13	20
3	PT2198_15131	Cypress, Monterey	13	30
4	ID000546	Cypress, Monterey	14	20
5	PT2198_1522	Pine, Monterey	33	50

Typically, a permit from the city is required for removal of a heritage tree. Exceptions are allowed in the case of an emergency, in these cases a heritage tree may to be removed without a permit, as described in Municipal Code Section 7.40.040, which states "that in case of emergency, when a tree is imminently hazardous or dangerous to life or property, it may be removed by order of the city manager, or his or her designee, or of the chief of the Half Moon Bay fire protection district (City of Half Moon Bay 2011)."

4.4 Special-Status Species

4.4.1 PLANTS

Of the three special-status plants with CNDDB occurrences within 2 miles of the project areas, all were determined to have a low potential to occur in the study areas based on absence of suitable habitat and site conditions that are highly disturbed by anthropogenic land-use and by presence of non-native plant species such as cape ivy and eucalyptus; meaning they are unlikely to occur (Figure 3; Table 1). No special-status plants were observed within the study areas during the March 2018 site visit. The March 2018 site visit overlapped the blooming period for perennial goldfields and Choris' popcornflower. In addition, no wild strawberry was observed during the March 2018 site visit, which also overlapped with this species' blooming period. These species are not expected to occur in the project area, therefore no impacts to these species are anticipated. No further actions are recommended.

4.4.2 WILDLIFE

Four species of special-status wildlife were determined to have a high potential to occur in the project area: CRLF, SFGS, western pond turtle, and saltmarsh common yellowthroat. Additionally, several special-status wildlife are proposed to have a moderate potential to occur in the project area: steelhead and bats.

4.4.2.1 Steelhead

Migrating steelhead may be present in Pilarcitos Creek if work occurs when the water level is high enough to allow passage. There is no vegetation removal proposed within the riparian corridor of arroyo willow thicket, so there is visual screening between the creek and the proposed tree removal activity. The vegetative screening would prevent any startle reflex by the fish, and avoid direct impact, by preventing any impact to migration within the creek.

Since trees are not proposed for removal within the arroyo willow thicket, there is no potential for any decrease in shade along that section of the creek, and no changes in sedimentation or runoff volumes that would be considered indirect impacts. There is no direct or indirect impact anticipated from the proposed tree removals along the pipeline alignment.

4.4.2.2 CRLF and SFGS

Suitable aquatic habitat for CRLF and SFGS is present in and around the riparian corridor for Pilarcitos Creek, as well as several nearby ponds. Upland habitats within the project area are accessible to both species, and the Monterey pine forest and eucalyptus woodland is broadly suitable to provide hibernacula for both species, although garter snake tend to prefer more open habitats so that they may bask outside the burrows on sunny days. The eucalyptus woodland is accessible from Pilarcitos Creek, but for wildlife to access the Monterey pine forest from Pilarcitos Creek, they would have to cross SR-92, which appears to be a partial barrier for CRLF and SFGS, but not a complete barrier. Due to the aquatic habitat nearby, and the accessible uplands within the project area, there is a high potential for these species to occur in the work

area as individuals foraging, aestivating, hibernating or transiting through the habitat types that surround the aquatic resources and the riparian corridor.

Work activities will result in removal of trees in eucalyptus woodlands. Removal of trees from the eucalyptus woodlands appears to be of limited impact for several reasons:

1. Eucalyptus woodlands do not provide an abundant source of either species primary prey species, the pacific chorus frog. The riparian corridor and Pilarcitos Creek itself are likely to be the primary foraging habitats.

2. Eucalyptus do not provide breeding habitat for CRLF.

3. Eucalyptus are generally suitable but not preferred habitat for hibernation by SFGS.

4. Eucalyptus do not provide any unique habitat that is necessary during a particular life-history period for either species.

5. The area of habitat to be modified is relatively small.

6. The quantity of similar habitat type is not limited in the vicinity of Pilarcitos Creek.

There is a risk of direct impact on individuals that may be present during work activities. BMPs (see Section 5.1 and 5.2) would be implemented to reduce the potential for species to be impacted during construction, and by following measures defined by the Bay Area Habitat Conservation Plan (BAHCP; Permit Number TE56826C-0; ICF 2017). No indirect impacts are anticipated because the removal of trees will not alter the habitat types available to the species, nor is the removal expected to result in any changes to aquatic features within the project area through changes in runoff, water quality or any other measure of habitat quality.

4.4.2.3 Nesting birds

Raptors and Migratory Bird Treaty Act *protected nesting birds (including saltmarsh common yellowthroat):* Habitats found within the study areas provide suitable nesting bird habitat. No raptor nests were observed during the site visit, however, there is a potential for raptors to nest in the large eucalyptus and Monterey pine trees near the site. The riparian corridor also provides suitable nesting habitat for saltmarsh common yellowthroat in shrubs and in stands of dense vegetation. Tree removal activities have the potential for both direct and indirect impacts. Raptors and other nesting birds could be impacted directly by the removal of a tree containing an active nest, or indirectly by removal of trees causing disturbance and abandonment of a nest. However, PG&E will implement appropriate AMMs to reduce the potential for impacts to actively nesting birds within the project areas (see Section 5.4).

4.4.2.4 Roosting bats

Species of bats that roost in forested and riparian habitats, may be present in the large eucalyptus trees and willows slated to be removed. Two special-status bat species have the potential to occur within the project area. These include, western red bat, a tree

roosting species, as well as pallid bat. Pallid bats preferentially select caves, crevices but they will also roost in hollows and crevices of large trees should they occur within the study area. Western red bats may roost in the foliage of broad-leafed trees, such as cottonwood, sycamore and in willow riparian habitats. Pallid bats my roost in the hollows or cavities of large trees. While there is little information on the use of non-native eucalyptus by native bats, there has been documented accounts of two Western red bats utilizing non-native eucalyptus (*Eucalyptus camaldulensis*) leaf litter as an overwintering site (Johnston and Whitford 2009). Based on the presence of suitable foraging and roosting habitat, western red bats and pallid bats are considered to have a moderate potential to occur within the project area.

Removal of trees may have direct impact on roosting bats if they are not detected and allowed to leave the area prior to tree removal. Indirect impacts through reduction of roosting habitat availability is not anticipated because of the abundance of similar eucalyptus habitat along Pilarcitos Creek.

The measures described under Section 5.3 will be implemented during all project work to minimize potential direct impacts to bats.

5 Avoidance Measures

5.1 General AMMs

- When accessing work sites, limit travel and parking of vehicles and equipment to pavement, existing roads, right of ways, and previously disturbed areas.
- No off-road vehicle travel.
- Vehicle access across streams and wetlands shall be limited to existing roads and crossings.
- Laydown and staging shall be conducted in previously developed or disturbed areas.
- Project activities shall minimize foot traffic and disturbance to the extent practicable.
- Vegetation removal shall not exceed the minimum amount necessary to complete work at the site.
- All trash shall be removed from the project sites daily to prevent attracting wildlife to the project areas.
- Before moving vehicles, chippers, and other heavy equipment, check for wildlife to ensure they are not crushed.
- Other than vegetation identified for removal, no wildlife or plants shall be handled or removed from the site by anyone except approved biologists. Wildlife in project areas shall be permitted to leave on their own.

5.2 Special-status Amphibians and Reptiles

- A qualified biologist shall be on-site for all work activities and shall perform a pre-activity survey each day before the start of work occurs to clear the work area of sensitive species.
- Work shall be completed during the dry season, between June 1 and October 15. If work cannot be completed during this time, all work activities shall be performed during dry conditions. Dry conditions are defined as:
    - No measurable precipitation having fallen within the 48 hours before the start of work.
    - No measurable precipitation falling during work.
    - No significant chance of rainfall in the weather forecast for the proposed work window. A significant chance of rainfall is a 60 percent or greater likelihood of precipitation as identified by www.noaa.gov.
- A qualified biologist shall flag the work areas and all suitable burrows and/or crevices identified within these areas with highly visible flagging before work occurs.
    - If possible, no small mammal burrows shall be included in the work areas and/or off-road access routes.
    - The biologist shall inspect the flagged burrows or crevices and remove any soil from the entrance at least once during the day and before leaving the work area.
    - No heavy equipment shall operate within 10 feet of a flagged burrow and/or crevice.

5.3 Bats

- If roosting bats are detected in the work area, a no equipment/no activity buffer of 100 feet will be implemented around the roost unless a qualified biologist can assign a site-specific reduced buffer or limited activity buffer if the standard buffer would constrain the proposed activity.
- Work must be confined to the period between one hour after sunrise and one hour before sunset to minimize the potential for disturbance to foraging adults.

5.4 Nesting Birds

- If work is scheduled to occur during the nesting bird season (Feb. 15 to Aug. 31), a pre-activity survey for nesting birds shall be conducted no more than 14 days before the start of work. If work cannot be completed within 14 days of a survey, work areas shall be resurveyed. Survey results shall be conveyed to the project manager by the PG&E biologist or land planner. If an active nest is found in

vegetation to be removed, work will be postponed until the nest is no longer active. If an active nest is found in adjacent vegetation, a buffer will be established based on the species. The on-site biological monitor will observe the nest for signs of disturbance, and if necessary, stop work, and consult with a PG&E biologist regarding next steps (e.g., stopping all work, increasing the buffer, etc).

- If an active bird nest is observed during work activities, all work shall cease in proximity to the nest and the on-site biological monitor shall contact a PG&E Biologist to determine next steps (e.g., stopping all work, increasing the buffer, etc).

5.5 Vegetation Restoration

- RW-V-2196-15: per the agreement with the property owner, the five trees to be removed directly in front of home will be replaced with compatible vegetation and a privacy fence outside of the outer pipe zone to prevent future conflicts with pipeline maintenance. The other vegetation to be removed will not be replaced on the property. City code 18.38.090(E)(2) discourages private landowners from planting blue gums on private property. Per the tree report submitted to the City on February 20, the dominant species of tree species within RWV-2196-15 is blue gum eucalyptus.

- RWV-2198-15: the property owner has elected to not have the trees replaced at a safe distance from the pipeline on their property.

- Because the private property owners have declined tree replacement on their property, PG&E proposes to replace trees in accordance with the City's Heritage Tree Ordinance (Section 7.40.060), including the blue gum eucalyptus, which is not considered a heritage tree under the ordinance (Section 7.40.020). This means PG&E will plant 35 24-inch box trees at a location to be determined.

6 Conclusions

The project has been designed to remove the minimum number of trees necessary to meet the safety goals of the program, thus balancing protection of biological resources with requirements for public safety.

Individuals of several species may be directly impacted if they are present within the project area during vegetation removal, including CRLF, SFGS, bats, and nesting birds, but indirect impacts that may result in habitat change or alteration of ESHAs or perennial creek buffer zones are not anticipated. AMMs are proposed to limit the risk to those individuals that may be present within the project areas during vegetation removal activities.

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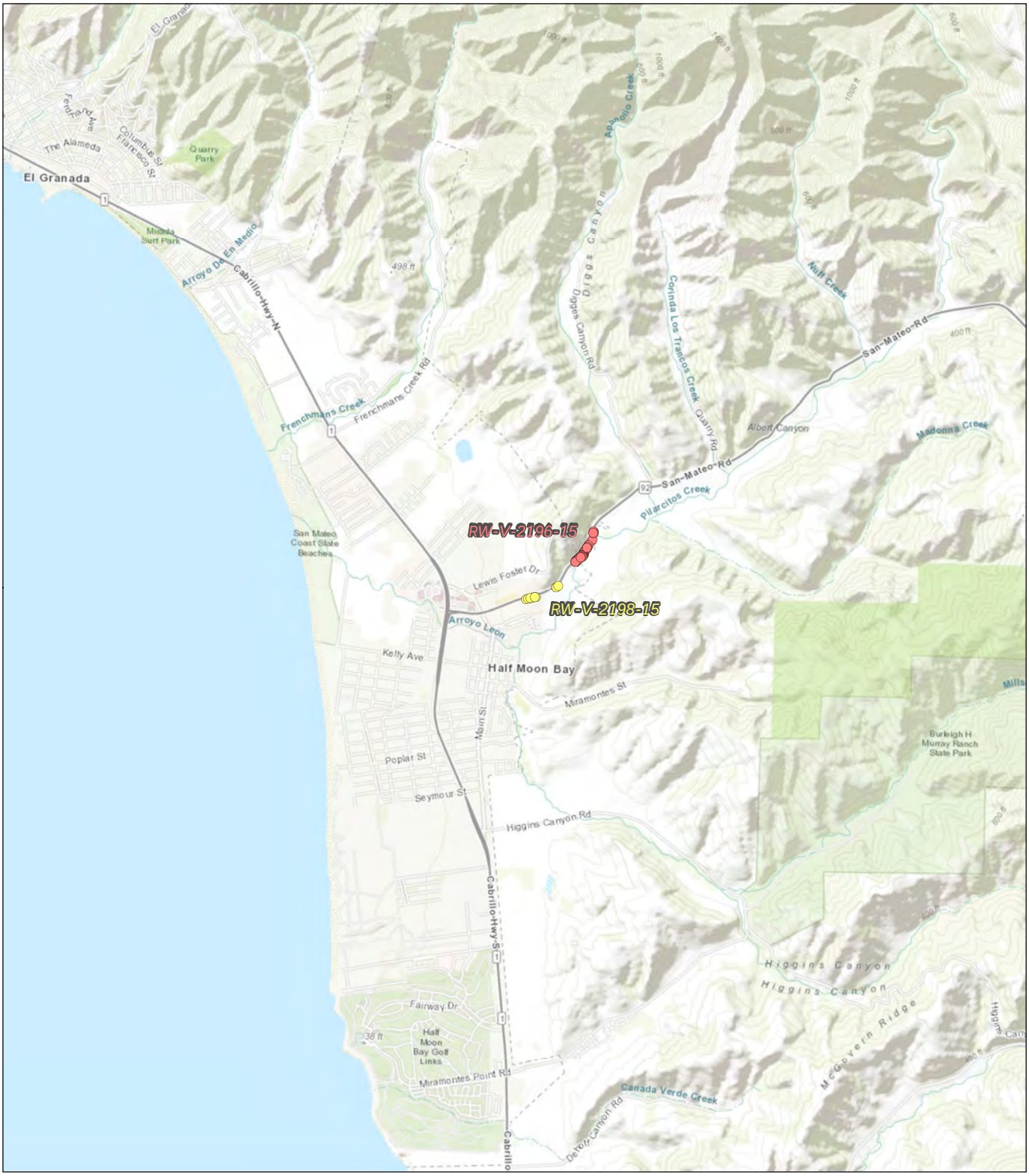
FIGURES



Vegetation Management Units

- Trees Proposed for Removal, Site RW-V-2196-15
- Trees Proposed for Removal, Site RW-V-2198-15

Figure No.
Figure 1

Title
Project Location

Project
Pacific Gas and Electric Company
Community Pipeline Safety Initiative

Project Location
Half Moon Bay, San Mateo County, CA

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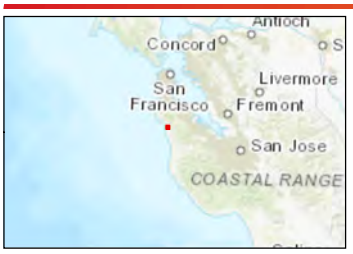

- Proposed Tree Removals
- Proposed Heritage Tree Removals
- 200-foot Buffer
- Pipeline Alignment

Habitat
- Agriculture
- Wild oats grassland
- Developed/Landscaped
- Eucalyptus Woodland
- Cattail marsh (pond)
- California Sagebrush Scrub

Figure No.
Figure 2a

Title
Habitat within 200 Feet of RW-V-2198-15

Project
Pacific Gas and Electric Company
Community Pipeline Safety Initiative

Project Location
Half Moon Bay, San Mateo County, CA

0 100 200
Feet

N

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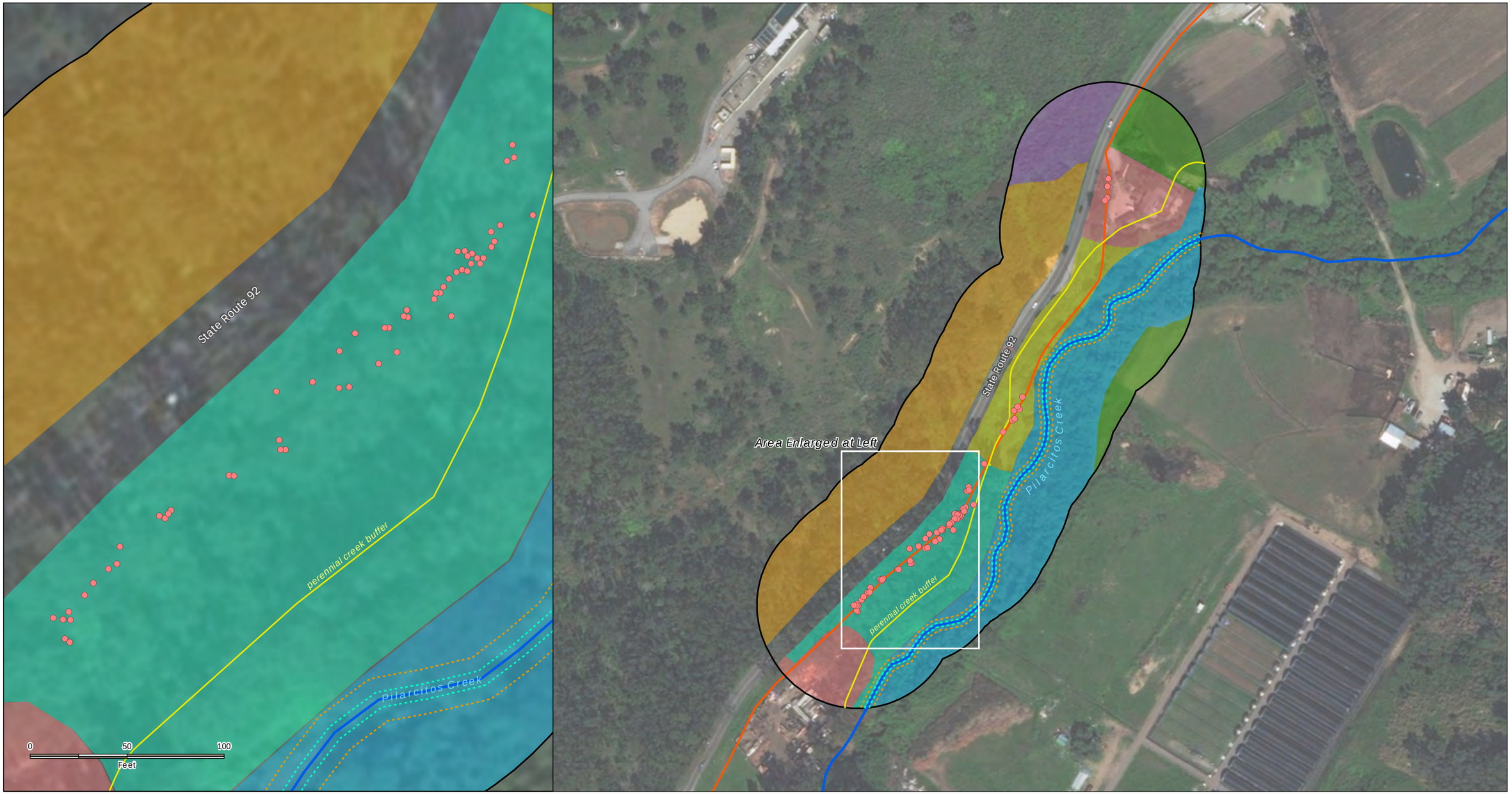

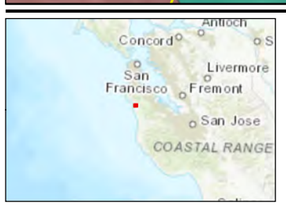

- Proposed Tree Removals
- 200-foot Buffer
- Pipeline Alignment
- Pilarcitos Creek
- Top of Bank (TOB)
- Ordinary High Water Mark (OHWM)
- Perennial creek buffer

Habitat
- Agriculture
- Developed/Landscaped
- Eucalyptus Woodland
- Monterey pine forest
- Arroyo willow thicket
- Himalayan blackberry scrub
- California sage brush scrub

N

0 100 200
Feet

Figure No.
Figure 2b

Title
Habitat within 200 Feet of RW-V-2196-15

Project
Pacific Gas and Electric Company
Community Pipeline Safety Initiative

Project Location
Half Moon Bay, San Mateo County, CA

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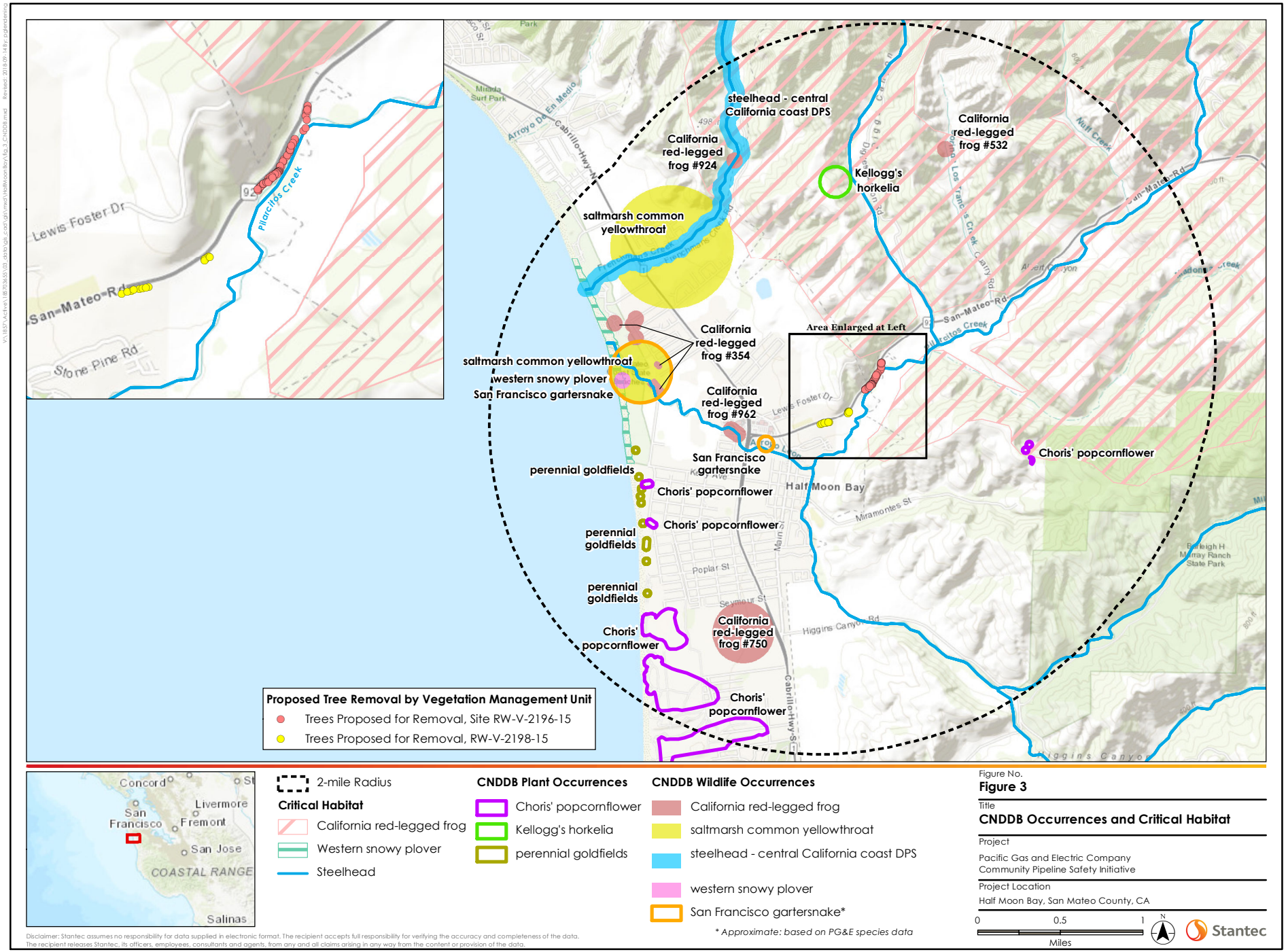

Figure No.
Figure 3

Title
CNDDB Occurrences and Critical Habitat

Project
Pacific Gas and Electric Company
Community Pipeline Safety Initiative

Project Location
Half Moon Bay, San Mateo County, CA

Stantec

APPENDICES

APPENDIX 1. PHOTO LOG

Photo 1. Arroyo willow scrub habitat near the north bank of Pilarcitos Creek. These trees will not be removed. View to the south at site RW-V-2196-15.

Photo 2. Arroyo willow scrub habitat near the north bank of Pilarcitos Creek. These trees will not be removed. View to the east at site RW-V-2196-15.

Photo 3. Eucalyptus woodland present in RW-V-2196-15. View to the southwest.

Photo 4. Maintained trail separating riparian area of arroyo willow scrub from slope of Himalayan blackberry scrub up to SR-92. View to the southwest at site RW-V-2196-15.

Photo 5. Non-native wild oat grassland. View to the southeast at site RW-V-2198-15.

Photo 6. Walking Trail, RW-V-2198-15. View to the northeast.

Photo 7. Pilarcitos Creek. View to the east at site RW-V-2196-15

Photo 8. Cattail marsh at an agricultural pond, south of RW-V-2198-15, no access during site visit. View to the southeast.

APPENDIX 2. PLANTS OBSERVED DURING MARCH 2018 SITE VISIT

Plants Observed During March 8, 2018 Site Visit

blackwood acacia	*Acacia melanoxylon*
green alders	*Alnus viridis*
gray alders	*Alnus incana*
California sagebrush	*Artemesia californica*
slender oat	*Avena barbata*
black mustard	*Brassica nigra*
ripgut brome	*Bromus diandrus*
poison hemlock	*Conium maculatum*
pampas grass	*Cortaderia solloana*
Monterey cypress	*Cupressus macrocarpa*
cape ivy	*Delairea odorata*
horsetail	*Equisetum* sp.
loquat	*Eriobotrya japonica*
storks bill	*Erodium* sp.
eucalyptus, blue gum	*Eucalyptus globulus*
white ramping fumitory	*Fumaria capreolata*
galium	*Galium* sp.
French broom	*Genista monspessulana*
wild geranium	*Geranium dissectum*
honey locust	Gleditsia triacanthos
common rush	*Juncus* sp.
western juniper	*Juniperus occidentalis*
Bermuda buttercup	*Oxalis pes-caprae*
bristly ox-tongue	*Picris echioides*
Monterey pine	*Pinus radiata*
blackberry	*Rubus* spp.
curly dock	*Rumex crispus*
willows	*Salix* spp.
redwood	*Sequoia sempervirens*
sow thistle	*Sonchus* sp.
dandelion	*Taraxacum* sp.
poison oak	*Toxicodendron diversilobum*
nasturtium	*Tropaeolum* sp.
cattail	*Typha* sp.
stinging nettle	*Urtica dioica*
vetch	*Vicia* sp.
bigleaf periwinkle	*Vinca major*