is a fence at MP 1.38, which would not impede or redirect flood flows. The project will not affect any dams. The project site is inland and not in an area subject to seiche, tsunami, or mudflow.

9. LAND USE AND PLANNING: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Physically divide an established community?	☐	☐	☐	☑

The Project does not include construction of any above-ground structures or roadways that would divide an established community.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑

Public utilities are not subject to local zoning and land use controls; nevertheless, the Project would not conflict with any local land use plan, policy, or regulation.

The following table lists the Solano County land use designation assigned to each by the Solano County General Plan. The County General Plan is the guide for both land development and conservation in the unincorporated portions of the county. The County's General Plan Land Use Diagram depicts land use designations both for unincorporated areas of the County and for lands in incorporated cities situated within the County.

Name	County/City	Land Use Designation
MLV 4.88	Solano/County	Agriculture
MP 1.38	Solano/County	Agriculture

The Project does not propose to change any of these land use designations, nor would it conflict with allowable uses under these designations.

Zoning districts are established to promote compatible patterns of land use within the zoning jurisdiction of a county or city and to establish site development regulations and performance standards appropriate to the purposes of each district and their respective uses. The Project would comply with existing zoning regulations applicable to the investigation sites.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(c) Conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan?	☐	☐	☑	☐

The Solano County Water Agency (SCWA) and member agencies have developed a Multi-Species Habitat Conservation Plan (HCP) for the Solano Project contract service area (SCWA, 2007). The service area encompasses all of Solano County and a portion of Yolo County, and accounts for all activities undertaken by or under the permitting authority and control of the member agencies. The plan area supports unique habitats, numerous vegetation communities, and 71 "covered species". The Project route traverses through two Covered Activity Zones designated by the plan: Zone 2- SCWA and Irrigation Districts and Reclamation District Boundaries; and Zone 3-Remainder of the County.

Coverage under the East Contra Costa County HCP/NCCP is not being pursued for this Project; nevertheless, the Project is consistent with the mission of the HCP/NCCP. The mitigation measures described in Section 4 (Biological Resources) of this Initial Study would help to avoid and minimize potential impacts to endangered species.

10. MINERAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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?	☐	☐	☐	☑

No known mineral resources are located on the Project site.

11. NOISE: Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☑	☐

Construction activities associated with Project would require earth-moving equipment, generators, trucks, and other equipment that could result in a temporary increase in noise levels and groundborne vibration that may exceed normal background levels.

At most, the Project construction activities may result in the following temporary noise levels:

- 81 dBA - 50 feet away from the investigation site
- 48 dBA - 2500 feet away from the investigation site (Federal Transit Administration, 2006).

Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☑	☐
(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
(d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑	☐

The Project would not result in a permanent increase in ambient noise levels in the Project vicinity, because the unsubstantial noise impacts would occur only temporarily during construction.

	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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
(f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

Two of the investigation sites are located within 2 miles of the Travis Air Force Base. The Project sites are not located within 2 miles of any privately operated airstrips.

Sensitive receptors are facilities such as hospitals, schools, convalescent facilities, or residential areas. The closest sensitive receptor to investigation site MP 1.38 is a residential area 5.6 miles away. The closest sensitive receptor to investigation site MP 4.88 is a residential area 2.3 miles away.

The Project would not expose people residing or working in the Project area to excessive noise levels. The temporary construction activity noise levels would exceed the Sonoma County General Plan's noise level standards. While public utilities are not subject to local zoning and land use controls, avoidance measures, such as limiting construction hours, would be implemented. These measures would ensure that noise impacts on adjacent uses, including sensitive receptors, would be minimized. The Project would comply with local noise ordinances to the extent feasible.

Avoidance and Minimization Measures

The following avoidance and minimization measures would be implemented to minimize noise impacts, to the extent feasible.

- **Care of Equipment:** PG&E shall ensure that equipment engines are covered and mufflers are in good working condition. This measure can reduce equipment noise by 5 to 10 dBA (U.S. Environmental Protection Agency, 1971).

- **Equipment Location:** All stationary equipment such as compressors and welding machines shall be located away from sensitive receptors to the extent practicable.

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12. POPULATION AND HOUSING: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Induce substantial 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 housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
(c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

The proposed Project does not include new housing or businesses or land use changes that would induce population growth in the area. Project construction would last approximately 4 months and would only require a small number of workers; therefore, the Project would not increase the demand for housing in the project area. The Project is an inspection and maintenance Project, and would not increase gas utility services. No indirect inducement of population growth would occur.

The proposed Project would not displace housing or people.

13. PUBLIC SERVICES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) 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:				
(i) Fire protection?	☐	☐	☑	☐
(ii) Police protection?	☐	☐	☐	☑
(iii) Schools?	☐	☐	☐	☑
(iv) Parks?	☐	☐	☐	☑
(v) Other public facilities?	☐	☐	☐	☑

The Project would not increase demand for police protection, schools, parks, or other public facilities, because it does not include any new development that would require the provision of new or expanded governmental facilities or services, such as increased police protection or new or expanded schools and parks.

The investigation sites are near open grassland, vegetation and residential areas that have the potential to experience fires. Standard measures would be implemented to minimize any fire potential. Fire protection for the sites are provided by the Fairfield Fire Department established in 1905 and the Montezuma Fire Protection District established in 1951.

14. RECREATION. Would the project:

	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?	☐	☐	☐	☑

The Project would not generate increased use of existing facilities, as it would not involve the construction of new housing or other development that would increase demand for parks and other facilities.

The Project itself does not include recreational facilities; nor would it require the construction or expansion of recreational facilities.

15. TRANSPORTATION/TRAFFIC. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☑	☐
(b) Exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highways?	☐	☐	☑	☐

Construction activities would generate approximately 3 daily vehicle trips over the one-month construction period. Construction vehicles would use local, collector, minor and major arterial roads to reach the investigation sites. This minor increase in traffic on local streets would not have a significant impact on traffic volumes or level of service on the local, collector, minor and major arterial roads.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☑

The proposed Project would not affect air traffic patterns.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
(e) Result in inadequate emergency access?	☐	☐	☐	☑
(f) Result in inadequate parking capacity?	☐	☐	☐	☑
(g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☑

The Project would not change the design of any existing roads. Road closures would not be necessary during construction activities at the three investigation sites. Parking for construction workers at MP 4.88 can be accommodated at the staging areas. Parking for construction workers at MP 1.38 can be accommodated at the staging areas and at the Creed Stations.

16. UTILITIES AND SERVICE SYSTEMS. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☑	☐
(b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
(c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑

(d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☑
(e) 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?	☐	☐	☐	☑
(f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☑
(g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☑

No long-term increase in demand for utilities would result from the proposed Project, because it would not result in any new development. Therefore there is no need for an expanded water supply, treatment facilities or waste disposal facilities.

Water trucks would be used at MP 1.38 for dust control during construction; existing supplies are sufficient to provide this water. Construction workers would use contractor-supplied portable toilets, the wastewater from which would be transported off-site to a wastewater treatment facility for processing; adequate treatment capacity is available to accommodate this.

Construction work at each location would require that the gas line be taken out of service during construction; however, to keep from shutting down the entire line, PG&E would only shut down the section of pipe where construction is planned. This interruption in service would be temporary, and would not result in a significant impact.

17. MANDATORY FINDINGS OF SIGNIFICANCE:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Does the project have the potential to 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, 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?	☐	☐	☑	☐

18. GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☑
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☑

The framework for regulating Green House Gas (GHG) emissions in California falls under the implementation requirements of Assembly Bill (AB) 32. In 2006, the California State Legislature signed the Global Warming Solutions Act of 2006 or AB 32. This law requires ARB to design and implement emission limits, regulations, and other measures such that statewide GHG emissions are reduced in a technologically feasible and cost-effective manner to 1990 levels by 2020. The statewide 2020 emissions limit is 427 million metric tons carbon dioxide equivalent (CO_2e) (ARB, 2007). Carbon dioxide emissions account for approximately 90 percent of the statewide GHG emissions (ARB, 2007). Methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride emissions account for the remainder of the statewide GHG emissions (ARB, 2007).

Construction Impacts

Potential short-term impacts from the Project may result from construction activities. As described in Section 15. Transportation/Traffic below, construction activities would generate approximately 3 daily vehicle trips over the one-month construction period. In non-attainment areas, construction equipment exhaust emissions of ozone precursors (NOx and ROG), exhaust PM_{10}, and soil-disturbing activities may temporarily impact air quality. According to the BAAQMD CEQA Guidelines, implementation of the measures identified in the CEQA Guidelines (see Avoidance and Protection Measures listed in Section 2. Air Quality, above) would reduce fugitive PM_{10} emissions during construction. Similarly, YSAQMD recommends implementing best management practices to reduce fugitive dust emissions (YSAQMD, 2007). Implementation of these Avoidance and Protection Measures will ensure that fugitive dust emissions will be less than significant.

However, fugitive dust APMs would not address construction vehicle exhaust emissions of NO_X or ROG. According to the BAAQMD CEQA Guidelines, construction vehicle emissions (NO_X and ROG) are included in the emissions inventory that is the basis for the regional air quality plans and are not expected to impede attainment or maintenance of the ozone standards in the Bay Area (BAAQMD, 1999). Construction emissions from the Project will be minimal and will fall well below the YSAQMD thresholds for ROG, NOx, exhaust PM10, and fugitive

PM10 thresholds (Yolo-Solano Handbook for Assessing and Mitigating Air Quality Impacts, 2007). Since the construction vehicle emissions fall below the significance thresholds, the air quality impacts would be less than significant.

Operational Impacts
As described above in Section 3. Air Quality, operation of the Project would result in minor air emissions from periodic operation and maintenance activities, which would be even less then the minimal construction vehicle emissions. These activities are already part of the maintenance and operation of the existing gas pipelines. Therefore, operation emissions would not be expected to cause or contribute to an air quality violation. Since the Project will result in only limited air emissions during operations, no impact will occur and subsequently, no mitigation is required. However PG&E is committed to the application of GHG reduction Avoidance and Protection Measures on facilities, including this Project.

GHG Impacts
Because the potential for exhaust GHG emissions from construction vehicles is expected to fall below the GHG impact thresholds, no emission modeling was conducted. The short-term increase in GHG emissions during construction activities would be imperceptible when compared to the ARB's estimated 2020 emission limit of 427 million metric tons CO_2e. Therefore, construction GHG emissions will not interfere with ARB's long-term goal to reduce GHG emissions to 1990 levels by 2020. Further, as discussed below, PG&E is committed to apply GHG reduction measures for all facilities. Therefore, as discussed below, PG&E's incorporation of avoidance and protection measures into Project design will further ensure that GHG emission impacts are less than significant.

Avoidance and Protection Measures
CEQA criteria require the consideration of local, State and federal plans, policies and regulations when evaluating potential Project impacts and developing mitigation measures. These requirements are considered part of the Project as evaluated and are considered Avoidance and Protection Measures (APMs.) Upon evaluation of the Project, additional APMs were identified to address State and local plans, policies and requirements. PG&E has incorporated these additional APMs into the Project description to minimize the Project's air emissions. All PG&E standard practices are also considered avoidance measures and are considered part of the Project.

The following company-wide standard APMs will be implemented by PG&E to reduce GHG emissions in the Project area:

Company-wide GHG Reduction APMs.
PG&E has employed the following programs intended to reduce GHG emissions from daily operations:

PG&E supports the Natural Gas STAR, a program promoting the reduction of methane (at least 21 times as potent as CO2 on a per-ton basis) from natural gas pipeline operations. Since 1998, PG&G has avoided the release of thousands of tons of methane.

PG&E is an active member of the SF6 Emission Reduction Partnership for Electric Power Systems, a voluntary program between the EPA and electric power companies that focuses on reducing emissions of sulfur hexafluoride (SF6) from transmission and distribution operations. Since 1998, PG&E has reduced the SF6 leak rate by 89 percent and absolute SF6 emissions by 83 percent.

In June 2007, PG&E launched the ClimateSmart program, a voluntary GHG emission reduction program that allows its customers to balance out the GHG emissions that are produced by energy use, making their energy use "climate neutral." For ClimateSmart customers, PG&E calculates the amount needed to make the GHG emissions associated with the customer's energy use "climate neutral" and adds this tax-deductible amount to their monthly energy bill. One hundred percent of customer payments are applied to funding new GHG emission reduction projects in California, such as projects that capture methane gas from dairy farms and landfills and those that conserve and restore California's forests.

PG&E is offsetting all of the GHG emissions associated with the energy used in PG&E's buildings by participating in its ClimateSmart program. In 2007, this amounted to over 50,000 tons of CO_2 reductions.

ARB will review and adopt Early Action Measures (pursuant to the California Global Warming Solutions Act of 2006) by January 1, 2010, and equipment used during operation of facilities after 2010 will be subject to these requirements. In turn, PG&E will implement the ARB Early Action Measures for publicly-owned electric utilities as these policies become effective, and will continue its efforts with the EPA to identify and implement cost-effective operational and technical solutions to reduce SF6.

These actions will further reduce company-wide GHG emissions for all PG&E projects.

Project-specific CO_2 Reduction Measures.
To further reduce GHG emissions from Project construction (specifically CO_2); the following APMs will be implemented:

APM-GHG-1: Encouraging the use of bio-diesel fuel for diesel-powered equipment and vehicles.

APM-GHG-2: Encouraging construction workers to carpool.

APM-GHG-3: Encouraging the recycling of construction waste.

Based upon the quantified results of the implementation of these measures on larger PG&E projects, it is expected that the minimal CO_2 emissions from Project construction would also be further reduced by approximately 15 % through the implementation of these measures. In addition, based upon PG&E's commitment for

GHG reduction on all facilities, the Project's contribution to cumulative GHG emissions will also be less than significant.