Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IV. BIOLOGICAL RESOURCES: 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?	☐	☒	☐	☐
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 U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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?	☐	☒	☐	☐

SETTING

PUMP STATION SETTING

The site of the 44-acre Hercules Pump Station is relatively remote, though in a generally highly developed area. Its immediate surroundings include an Interstate highway right-of-way, grazed pastureland, and low-density commercial and industrial development. The Hercules Pump Station includes several buildings and large storage tanks, roadways and parking, and a considerable area of open space with mostly non-native grasses and trees. Part of the open lands includes a large grassed hill, artificially constructed to shield the tanks from potential visual impacts. Two small retention ponds are located on the property. The property abuts a small stream adjacent to Interstate Highway 80.

The Pump Station is completely fenced with very limited human access only to station personnel. Open lands on the property offer habitat for a variety of semi-urban wildlife. The grasslands and trees provide hunting opportunities for raptors likely found in the area. The forage provided by the large open pasturelands adjacent to the property probably attracts raptors to the area. A site visit by ESA staff in February 2001 revealed evidence of raptor use of the area. Several airborne raptors, probably red-tailed hawks, were observed overhead. A large nest, potentially belonging to a raptor, was observed on one of the large storage tanks on the property. The widely spaced trees within the property's grasslands provide ideal raptor foraging opportunities. The relatively unused grasslands probably provide an abundance of small mammals as valuable raptor prey.

The retention ponds and adjacent stream provide some limited riparian and wetland habitat. The retention ponds have developed some wetland vegetation, but water retention is of short duration and there is no other aquatic value to these ponds. The stream seems to be perennial and has good riparian habitat. Upon leaving the property, however, this stream is artificially channelized through developed property and offers little or no aquatic habitat to wildlife.

PIPELINE CORRIDOR SETTING

The pipeline corridor generally follows along the shorelines of San Pablo Bay, Carquinez Straits, and Suisun Bay. Land adjacent to this easement is primarily open parkland, residential, commercial, and industrial. The biological environment adjacent to the 35-mile long pipeline corridor can be characterized in three segments:

- The approximately 15-mile long portion from Richmond to Crockett is within highly developed commercial and industrial land uses between Interstate Highway 80 and San Pablo Bay. This portion includes the Pump Station in Hercules. The lands surrounding this portion of the pipeline offer little or no value to biological resources. There is little undeveloped habitat along this corridor with the exception of the Pump Station itself described above.

- An approximately 10-mile long portion from Crockett to Martinez passes through largely inaccessible, undeveloped shoreline. This portion follows the railway easement along Carquinez Strait. Above the shoreline are relatively steep grassed slopes up into hilly, open pasture and parklands. Much of this area is within the Carquinez Strait Shoreline Park, part of the East Bay Regional Park. This land is largely undeveloped grassland, interspersed with native trees characteristic of undeveloped areas of the hills surrounding the San Francisco Bay area. Most of these lands are devoted to parkland activities or are grazed with cattle. These lands provide substantial value for biological resources including several special status plant and animal species. This area is valuable habitat for special status raptors including Swainson's hawk, bald eagle, and northern harrier. Carquinez Strait, which the pipeline corridor parallels in this area, is an important aquatic resource for a variety of species. As the passage for the Central Valley drainage, 40% of all precipitation in the State of California passes through this channel. Several special status migratory fishes, including steelhead and chinook salmon, use this corridor for passage to and from spawning areas in the Central Valley rivers and streams.

- An approximately 10-mile long section from Martinez, eastward to Pittsburg continues through low-lying lands adjacent to Suisun Bay. Most of this corridor is located in wetlands. The pipeline replacement section, described in greater detail below, occurs at the beginning of this section. A description of the habitat for the replacement section, given below, also characterizes the general setting of this pipeline section.

PIPELINE REPLACEMENT SETTING

The 4,000-foot pipeline realignment within the City of Martinez would require installation of a new pipeline along the perimeter of a portion of the Martinez Shoreline Park. This site is where Alhambra Creek enters the Bay. The Park at this location encompasses the confluence of Alhambra Creek with Suisun Bay. Marsh restoration activities within this park, including areas within the proposed pipeline realignment corridor, are planned for 2001 and 2002 (personal communication, Jim Townsend, East Bay Regional Parks District).

Alhambra Creek is tidally influenced at this site, and the adjacent land to the ordinary high water mark is defined as federally protected wetland habitat. There is, however, very little wetland vegetation along Alhambra Creek at this location. A few sparse growths of cattails and sedges were observed along the riparian zone of the Creek just below the pipeline crossing. The marsh restoration activities noted above, however, will include vegetation establishment within the proposed pipeline corridor. If this vegetation were established prior to the pipeline installation, newly established habitat would exist where currently the habitat is degraded and sparsely vegetated.

Further downstream, as Alhambra Creek passes through the Park, it widens and becomes more marshlike. Upstream of the project site, the creek passes through downtown Martinez and is highly channelized with vertical stone and concrete banks.

Alhambra Creek and these adjacent wetlands provide habitat for several special status species. This habitat is protected by several federal and state laws and regulations noted above, as well as the conservation policies associated with the Park. Numerous rare or endangered plant species are potentially found at this site. A botanical survey would likely be required by wetland regulations before work in the area (e.g., Section 404 of CWA). Special status wildlife potentially occurring at this location include the following:

- At least eight species of ESA-listed resident and migratory fishes might use waters adjacent to the site. These include steelhead, Chinook salmon, Delta smelt, Splittail, longfin smelt, Pacific lamprey, river lamprey, and green sturgeon. It is unlikely that any of these species spawn upstream of or at the site, but their juvenile forms might be found at the site.

- Special status mammals that might be found in the habitat near this site include salt marsh harvest mouse and Suisun ornate shrew. Although no habitat for either is found directly within the pipeline corridor, there may be habitat in the adjacent Park marshlands.

- Several special status birds, including short-eared owl, northern harrier, California black rail, California clapper rail, and Suisun song sparrow might be found in nearby open wetlands.

- The northwestern pond turtle and California red-legged frog could be found in Alhambra Creek at this location.

Each of these species has sensitive life stages such as nesting, spawning, and rearing that are susceptible to disturbances that might result in an adverse impact. Many environmental laws and local and State policies protect these species.

Although, in general, the site may support habitat for any of the above sensitive and valuable biological resources, the narrow pipeline realignment corridor is on the edge of this habitat – separating it from industrial and transportation land uses. This corridor is also mostly previously disturbed land, sparsely vegetated along the creek, and occurs mostly in non-native ornamental vegetation for the rest of the realignment area. As such, the value of the corridor habitat for the above species is low because it is unlikely they would use this area immediately adjacent to automobile roadways and parking, industrial buildings, and other developed property.

REGULATORY SETTING

State and federal laws and regulations related to Biological Resources for the above-described Pipeline Project include the following:

- The Federal Endangered Species Act (ESA) protects plant or animal species designated by the USFWS or NMFS as either endangered, threatened, or special concern. The current list of designated species protected by the ESA includes several species found in the area as noted above. Projects that may affect listed species area required to consult with the appropriate agency regarding potential adverse impacts and mitigation development. Several species in the area where actions associated with the Pipeline Transfer may cause effects to biological resources are listed with the ESA. Portions of the project might affect some of these species and would require consultation with USFWS and NMFS in accordance with the ESA.

- The California Endangered Species Act (CESA) protects plant or animal species designated by the Fish and Game Commission as either endangered, threatened, or of special concern. The current list of designated species protected by CESA includes several species found in the area as noted above. Projects that may affect listed species area required to consult with the CDFG regarding potential adverse impacts and mitigation development. Several species found in and around the Project Lands are covered by CESA. Actions that might affect any of these species would require consultation with the CDFG.

- California Fish and Game Code Sections 1602 and 1603, also known as a Streambed Alteration Agreement, is administered by CDFG. This law requires any work within an area with a defined streambed obtain a permit from CDFG. These permits generally protect the

stream environment from unnecessary adverse impacts. Special consideration is given to potential impacts to special status species.

- The federal Coastal Zone Management Act protects all U.S. coastal areas from impacts. In the Project area, the San Francisco Bay Conservation and Development Commission (BCDC) has jurisdiction over all areas of San Francisco Bay subject to tidal action, and a shoreline band extending 100 feet inland. Installation of the new pipeline segment in Martinez along the tidally influenced Alhambra Creek will require a BCDC permit.

- The California Native Plant Protection Act directs the CDFG to preserve, protect, and enhance endangered plants in the state. CDFG designates native plants as endangered or rare, and requires permits for collecting, transporting, or selling such plants. This law parallels CESA protection for endangered and threatened plant protection, and adds protection for plants that are also "rare." A survey for plants protected by this Act may be required before portions of the action is implemented.

- The Clean Water Act, Section 401 is administered, in the project area, by the San Francisco Bay Regional Water Quality Control Board (RWQCB – Region 2). This Section requires a National Pollution Discharge Elimination System (NPDES) permit for any effluent discharge into San Pablo Bay, Carquinez Strait, and Suisun Bay. Proposed pipeline realignment in Martinez might require a NPDES permit if any material, such as drilling muds, might be discharged into the Alhambra Creek as part of the installation.

- The Clean Water Act, Section 404, (CWA) is administered by the US Army Corps of Engineers (COE) and is intended primarily to protect water resources. This act provides extensive protection to wetlands for both hydrologic and ecological functions. The portion of the pipeline route that would require relocation, with a stream crossing and new pipeline installation at Martinez, may require a permit from the COE in accordance with this regulation because the pipeline replacement may fill wetlands adjacent to Alhambra Creek. Application of the CWA requires, like other federal laws, that a project requiring CWA approval must also comply with all other relevant State and federal laws and regulations.

- The Migratory Bird Treaty Act regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 CFR 10.13. This Act applies to birds that migrate through more than one country and is enforced by the USFWS. The Act was amended in 1972 to specify protection for migratory birds of prey (raptors). Raptors found at the pumping station and along the pipeline route would be protected by this Act.

BIOLOGICAL RESOURCE IMPACT DISCUSSION

a) Pump Station continued operation would have less than significant impacts. Noise and human activities associated with the resumption of oil movements through the pump station could likely disturb and perhaps cause abandonment of the site by raptors that may nest and use the site for foraging and for perch sites. Raptors are protected by laws

and regulations administered by USFWS and CDFG. Although it is unlikely that affected raptors would be listed with the ESA, they would be included in the Migratory Bird Treaty discussed above. The extent of potential affect would not be substantial. Oil movement activities will not displace habitat, but noise and human presence may prevent raptor nesting at, or hunting from, the site. The disturbance associated with oil movements would probably affect less than a few individual birds and continued operation will allow the facility site to provide raptor habitat.

Pipeline Corridor continued operation would have no impact. Although significant resources lie adjacent to this route, use of the pipeline would not cause any habitat alteration nor disturb any wildlife that may use the corridor. Access to the pipeline, if required, would use the railway easement and it would not be necessary to affect natural habitat to perform routine pipeline maintenance. Any substantial habitat disturbance outside the railway easement would likely require compliance with regulatory agencies as necessary (e.g., the East Bay Regional Parks District in the Park, or the Army Corps of Engineers if wetlands).

Pipeline Replacement in Martinez could potentially have a significant impact to listed species. The action could affect several special status species as noted above that might use the site. These species are protected by laws and regulations administered by CDFG and USFWS and NMFS, including the federal and state ESA. Several of these species could be affected through habitat alteration or by direct displacement along the reconstruction corridor.

Although the likelihood of impacts to species or habitat exists, the extent of the effect would likely not be substantial. The corridor is immediately adjacent to an existing railroad bridge, an industrial building, and other transportation facilities (e.g., roads, railway, and parking lots). The value of the area that would be disturbed by pipeline installation for wildlife is not high because of the presence of these facilities. The corridor has very little native vegetation and provide poor habitat in its current condition. Nevertheless, some listed species may be found at the project area; without a complete biological survey of the areas potentially affected by construction activities, the potential to impact listed species is not fully known. Mitigation measures, such as avoidance of work during critical life stages of potentially affected species, replacement of valuable vegetation for habitat, or soil erosion and sediment transport avoidance, are commonly used and approved by resource agencies to reduce potential adverse affects to less than significant levels for species that might be affected at this site.

Impact IV.1: Pipeline replacement in Martinez may significantly impact special status animal species protected by State and Federal ESA. Several species could be impacted by habitat alteration or direct displacement along the pipeline replacement corridor.

Mitigation Measure IV.1: Prior to commencing construction activities, SPBPC shall conduct a biological survey of all areas that would be affected by construction of the replacement section in Martinez and submit the survey for review and approval by the CPUC mitigation monitor. The survey shall include a biological assessment of the potential of construction activities to create an 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. If the survey reveals that such a potential exists, SPBPC shall conduct a formal consulting process with the appropriate resources agencies to address the potential to create a significant impact to listed species.

Based on this consultation process, SPBPC shall implement measures deemed necessary by these agencies to reduce potential impacts to a less than significant level. SPBPC shall inform the CPUC mitigation monitor of the results of the coordination and details of such measures to be implemented. The CPUC mitigation monitor shall monitor compliance with such measures.

Measures that might be required could include those such as the following proposed by PG&E in the Proponents Environmental Assessment:

General

- **Environmental training covering protection of biological resources in the 4,000-foot replacement section area shall be given to appropriate project personnel prior to construction.**
- **Erosion control measures and Best Management Practices shall be installed adjacent to Alhambra Creek, the unnamed drainage, and any associated wetlands to prevent sediment from entering the drainages.**

Botanical Resources

- **A revegetation plan shall be prepared if native vegetation would be removed.**
- **Previously vegetated areas that would be cleared during construction activities shall be revegetated with appropriate species, as required.**
- **Flagging and/or fencing shall be installed around adjacent riparian habitat to prevent incidental impacts to the area.**
- **If any native vegetation were removed at the replacement section, the affected area shall be revegetated with an appropriate native seed mix.**

Wildlife Resources

- **Prior to construction, surveys shall be performed for the California red-legged frog to determine presence or absence.**
- **If the California red-legged frog is determined to be present onsite, construction would not commence in this area until the U.S. Fish and Wildlife Service and California Department of Fish and Game were notified, and appropriate measures were developed to minimize disturbance to this species.**
- **Construction shall be timed to avoid the nesting period for raptors.**
- **If construction is scheduled to occur during the nesting season of raptors, preconstruction surveys shall be conducted to identify and avoid active raptor nests.**
- **Construction within one-half mile of an active raptor nest would not begin until the young had fledged from the nest.**
- **Bentonite released into drainages during construction shall be immediately cleaned up.**

Habitat temporarily disturbed as a result of construction shall be restored.

Significance after mitigation: Less than significant.

This example addresses only one potentially affected special status species (the California red-legged frog), whereas, the mitigation requirement would address potential effects to all special status species such as those described in the Environmental Setting. Implementation of Mitigation Measure IV.1 would reduce the project's potential to create a significant impact to listed species to a less than significant level.

b) Pumping Station continued operation would have no impact. There are no riparian communities adjacent to and within the Pumping Station facility. The two retention ponds and the small stream have riparian habitat. Re-operation of the plant would not affect these habitats. The ponds would function as they do now and no actions would occur at the Station that would affect the small stream along the edge of the property.

Pipeline Corridor continued operation would have no impact. The pipeline does pass through substantial riparian and other natural communities. Operation of the pipeline, however, will not alter or in any other way affect this habitat. Access to the pipeline for routine maintenance would occur on railway easement and not disturb natural habitat.

Pipeline Replacement in Martinez would have a less than significant impact. The proposed pipeline relocation in Martinez would impact a 4,000-foot long corridor that

includes riparian and other sensitive natural habitat identified by CDFG and USFWS. The new pipeline would cross two streams. The new pipeline would require displacement of riparian habitat along Alhambra Creek; this area is potential habitat for several special status species as noted above. Effects on these resources are likely from construction of a new buried pipeline.

Although protected habitat would be affected, the impact is less than significant because the extent and quality of the protected habitat are not of substantial value. The quality is not substantial because there is very little native riparian vegetation in the zone of disturbance, and the corridor lies adjacent to developed properties that lower the value of the corridor habitat for sensitive or special status wildlife. That is, although the site may technically provide habitat for special-status species found in the area, this habitat is of poor project quality because it is adjacent to buildings, a bridge, and a railroad track; and, the area has been recently disturbed and has not re-established natural vegetation within the area of potential pipeline construction. Therefore, it is quite unlikely that the habitat would support special status species. Furthermore, habitat effects would be of short duration. Following pipeline installation the corridor would be re-vegetated and returned to a simulated natural condition after pipeline installation. Construction activities would be limited to upland areas except where necessary, and offsite affects would be avoided.

c) Pumping Station continued operation would have no impact. There are three federally protected wetlands on the Pumping Station site as noted above the two retention ponds and a small stream along the property. Continued operation of the facility would not alter the hydrology or otherwise affect these wetlands or the stream. The retention ponds will continue to function as they currently do – operation of the Station will not affect runoff from the site. There are no actions associated with the Station that affect the small stream adjacent to the property.

Pipeline Corridor continued operation would have no impact. Although the pipeline corridor passes through substantial areas of federally protected wetlands, its operation would not alter the wetland because it would not require removal, filling, or hydrological interruption, or other actions affecting those wetlands.

Pipeline Replacement in Martinez could affect wetlands. Installation of the new pipeline would require direct removal and filling of federally protected wetlands located along the Alhambra Creek embankment as noted above. The extent of the effect would likely not be substantial because little area would be affected and the habitat would be easily restored to its current sparsely vegetated condition.

d) Pumping Station noise and human activities associated with oil movements through the pump station would have a less than significant impact. Additional activity at the facility may impede the use of the area for raptor nesting. As noted above, the site may offer raptor nesting and foraging habitat. Noise and human presence associated with facility operation would likely adversely affect any nesting raptors on the site. The extent of the

effect would not be substantial. Few individual raptors would be affected and these would not likely be species listed as endangered or threatened.

Pipeline Corridor continued operation would have no impact. Although the pipeline corridor passes through substantial habitat for migration and nursery of wildlife species, its operation would not affect these resources. Pipeline operation would not displace or interfere with the use of the habitat through which it traverses. Access to the pipeline for routine maintenance would use the railway right of way and not disturb wildlife habitat.

Pipeline Replacement in Martinez would have a less than significant impact. The construction of a new pipeline would occur within habitat used for migration and nursery of native and migratory species noted above. It is unlikely that direct use of the habitat affected by the project is substantial by any wildlife species. Although the pipeline corridor lies adjacent to valuable migratory and nursery habitat, the area affected by pipeline installation has little nursery habitat value. Pipeline installation would not affect potential movement of fishes or other aquatic organisms in Alhambra Creek because the pipeline would be installed beneath the streambed and installation methods would avoid significant sedimentation of Alhambra Creek or other indirect effects. Installation of the pipeline would not affect passage of upland wildlife because there is no nursery habitat within the corridor and the pipeline route is adjacent to roadways, railroad tracks, and industrial development, to which wildlife would not require access.

e) Pumping Station continued operation would have no impact. The Pump Station is not within any areas with policies or ordinances protecting biological resources.

Pipeline Corridor continued operation would have no impact. The pipeline corridor passes through substantial areas protecting biological resources as noted above. Operation of the pipeline would not conflict with any of the provisions of those policies because pipeline operation would have no effect on biological resources.

Pipeline Replacement in Martinez may have an impact that is potentially significant unless mitigation incorporation avoids potential conflicts affecting biological resources. Installation of the new pipeline would require some work adjacent to, and beneath, Alhambra Creek. This work would potentially conflict with marsh restoration activities planned for this area within the Martinez Shoreline Park.

Impact IV.2: Pipeline replacement in Martinez may include impacts that conflict with marsh restoration activities planned at the potential construction site, and adjacent marshlands within Martinez Shoreline Park, by East Bay Regional Parks District.

Mitigation Measure IV.2: Prior to commencing construction activities, SPBPC shall contact East Bay Regional Parks District (EBRPD), the sponsor of marsh restoration activities at the Martinez Shoreline Park, to reach agreement on how to

coordinate marsh restoration and pipeline installation plans: SPBPC shall avoid or minimize potential conflicts of pipeline replacement activities with marsh restoration plans at the site. Measures to avoid conflicts, such as timing of work, agreements on revegetation or replacement of habitat, would be included in this agreement. The agreement between SPBPC and the EBRPD shall be formalized in writing and submitted to the CPUC staff for review and approval by the CPUC mitigation monitor prior to commencing construction activities that may affect marsh restoration activities.

Significance after mitigation: Less than significant.

f) Pumping Station oil movements would have no impact. The Pump Station is not within any areas with local, regional, or state habitat conservation plans.

Pipeline Corridor continued operation would have no impact. The pipeline corridor passes through substantial areas with local, regional and state conservation plans. Operation of the pipeline would not conflict with the provisions of those plans because it would not affect natural resources protected by those plans.

Though no official Habitat Conservation Plan would be affected, Pipeline Replacement in Martinez may have an impact that is potentially significant unless mitigation incorporation avoids conflict with local approved habitat conservation plans. Construction of the new pipeline would occur adjacent to, and within the Martinez Shoreline Park, which has marsh restoration activities planned within the pipeline corridor. Construction activities associated with pipeline installation may conflict with those plans without coordination and adoption of measures to minimize or avoid effects to marsh restoration activities or results. Of greatest concern would be timing of the project to avoid disruption of the marsh restoration activities.

Impact IV.3: Pipeline replacement in Martinez may conflict with habitat conservation plans administered by the East Bay Regional Parks District for the Martinez Shoreline Park adjacent to the proposed construction corridor.

Mitigation Measure IV.3: Implement Mitigation Measure IV.2.

Significance after mitigation: Less than significant.