

4.7 BIOLOGICAL RESOURCES

Would the proposal result in impacts to:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Endangered, threatened, or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Locally designated species (e.g., heritage trees)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Locally designated natural communities (e.g., oak forest, coastal habitat, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Wetland habitat (e.g., marsh, riparian, and vernal pool)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Wildlife dispersal or migration corridors?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SETTING

Regional Setting

PG&E's generating facilities occupy a wide range of land uses and habitat types, from beaches to Bay-Delta to hydroelectric facilities in the Sierra Nevada. The current management of natural resources at its power plants and under its transmission lines is (and presumably the management of non-divested installations would continue to be) generally pro-active, seeking full compliance with laws and regulations that protect natural resources. Through the biological specialists in its Technical and Ecological Services office, PG&E has successfully managed endangered bald eagles and peregrine falcons on its lands, among other sensitive resources. It recently has undertaken to develop Habitat Conservation Plans under the provisions of the Endangered Species Act for its Central Valley power plants and transmission lines, and at its Bay-Delta facilities.

Biological Resources Regulatory Context

Federal Endangered Species Act

Under the Federal Endangered Species Act (FESA), the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered (16 USC 1533(c)). Pursuant to the requirements of FESA, an agency reviewing a proposed

project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the project area and determine whether the proposed project could have a potentially significant impact on such species. In addition, the U.S. Fish and Wildlife Service (USFWS) is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536(3), (4)).

California Endangered Species Act

Under the California Endangered Species Act (CESA), the California Department of Fish and Game (CDFG) has the responsibility for maintaining a list of threatened species and endangered species (Cal. Fish and Game Code 2070). The CDFG also maintains a list of "candidate species" which are species that the CDFG has formally noticed as being under review for addition to either the list of endangered species or the list of threatened species. The CDFG also maintains lists of "species of special concern" which serve as "watch lists." Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State listed endangered or threatened species may be present in the project area and determine whether the proposed project will have a potentially significant impact on such species.

The Clean Water Act

The regulations and policies of various federal agencies (e.g., the U.S. Army Corps of Engineers [Corps], U.S.D.A. Natural Resource Conservation Service [NRCS], U.S. EPA, USFWS, and National Marine Fisheries Service [NMFS]) mandate that the filling of wetlands be avoided unless it can be demonstrated that no practicable alternatives (to filling wetlands) exist. The Corps has primary federal responsibility for administering regulations that concern waters and wetlands within the project site. In this regard, the Corps acts under one statutory authority, the Clean Water Act (Section 404), which governs specified activities in "waters of the United States," including wetlands. The Corps requires that a permit be obtained if a project proposes placing structures within navigable waters and/or alteration of waters of the United States below the ordinary high water mark in nontidal waters.

The State's authority in regulating activities in wetlands and waters at the site resides primarily with the CDFG and the appropriate Regional Water Quality Control Board (RWQCB). The CDFG provides comment on Corps permit actions under the Fish and Wildlife Coordination Act. CDFG is also authorized under the State Fish and Game Code Sections 1600-1607 to develop mitigation measures and enter into a Stream Alteration Agreement (SSA) with applicants that propose a project that would obstruct the flow or alter the bed, channel, or bank of a river or stream in which there is a fish or wildlife resource, including intermittent and ephemeral streams.

The appropriate Regional Water Quality Control Board (RWQCB) must certify that a Corps permit action meets State water quality objectives (Section 401, Clean Water Act).

As described in Section 4.4, Water, each facility that discharges wastewater must operate within the parameters of the facility's National Pollution Discharge Elimination System (NPDES) permit issued by the RWQCB that limits the discharge flowrate, temperature, and concentration of constituents.

Local Setting

This document does not fully describe on-site or adjacent resources, which in many cases are complex and thoroughly studied, in other cases equally complex but with little available published information. The setting section attempts to provide enough information to understand the presence (i.e., the ecological context) of sensitive, at-risk biological resources.

Morro Bay

The salt marsh, tidal mudflats, open water and other upland areas around the Bay provide a complex of different habitats. These are especially valuable to birds (over 25,000 in one day were recorded in the 1970s) and the 66 recorded species of finfish, but the habitat values extend also to upland species such as the endangered Morro Bay kangaroo rat (CDFG 1974). All the fish and wildlife resources using the Bay and especially its inshore habitats are found adjacent to the plant or within the receiving waters of the discharge canal. Biological resources on site are associated with a section of Morro Creek which crosses the northern portion of the property. It is used by a variety of species, including the black-crowned night heron.

Morro Rock is a traditional nesting area for the endangered peregrine falcon and habitat for the endangered brown pelican. Salt marsh bird's beak (both state and federally-listed as endangered) is located at various sites near the plant.

Moss Landing

Moro Cojo Slough, to the south of the power plant, combines several fresh and saltwater habitat types within an area with relatively limited human access. Thirty-nine special status species (see definition below) are known to occur there (Habitat Restoration Group, 1993). To the north, Elkhorn Slough National Estuarine Research Reserve has been called one of the most important estuarine systems in California, and was designated an Estuarine Sanctuary under the provisions of the Coastal Zone Management Act in 1979 (ABA Consultants, 1989). It is especially rich in invertebrates, with over 400 species identified. Biological resources on site are limited to an area south and east of the middle tank farm area, where a seasonal wetland attracts shorebirds and waterfowl.

Six threatened or endangered species occur in the adjacent Elkhorn Slough National Estuarine Research Reserve: California brown pelican, California least tern; California clapper rail; Santa Cruz long-toed salamander; southern sea otter and peregrine falcon.

Oakland

Although the California Natural Diversity Data Base (1997) records occurrences of a few endangered, threatened, or rare species in the project vicinity (e.g., California least tern and salt marsh harvest mouse), the site itself is in a thoroughly industrialized urban landscape and has no significant biological resources.

CHECKLIST ISSUES

For all of the issues discussed below, this analysis assumes that the range of potential effects at the plant sites is defined by: 1) limited construction activity (e.g., fences) or soil remediation activities and 2) potential activities related to potential increases in energy being generated, including thermal changes in cooling water discharge and additional entrainment of marine organisms.

a) Endangered, Threatened, and Rare Species

These species are defined for the purpose of this assessment to include species in the following categories, including those considered to meet CEQA *Guidelines* Section 15380 criteria as rare, threatened or endangered: plants or animals listed or proposed for listing as rare, threatened, or endangered under the California Endangered Species Act or the Federal Endangered Species Act; plants included on lists 1A, 1B, and 2 of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 1994); animals designated by the CDFG as "Species of Special Concern" or that have been designated as "Protected" or "Fully Protected" by the state or federal government under law (e.g., the Bald Eagle Protection Act). Collectively, these species are also referred to as "special status" species.

Marine Organisms

Environmental regulation of intake and discharge effects are concentrated in the Federal Water Pollution Control Act of 1972 (for entrainment of marine organisms in intake structures) and in the State Water Resources Control Board's *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California*. The current compliance status is in part dependent on compliance with existing NPDES permits. NPDES permits limit the volume of wastewater discharge, the temperature of discharge, and concentration of constituents.

Endangered, threatened or rare species concerns are limited to the mortality of sea turtles when entrained during cooling water intake. Currently, incidences of turtle entrainment appear to be

rare. As explained in Section 4.4, Water, an increase in operation of the plant due to the project would not directly result in increases in volume of cooling water extracted from the ocean. However, it is likely that somewhat more water would be used. More water pumped from the ocean would increase the potential for marine organisms to be entrained, however these incidences are currently rare and it is unlikely that project conditions would substantially change this effect. The impact of the project is less than significant.

Morro Bay

If marsh habitat near Morro Creek are disturbed by remediation or minor construction activities, including increased erosion, there is the potential to significantly impact the salt marsh bird's beak and other wetland-dependent special status species. However, as discussed in Section 4.4, Water, erosion from these activities would be controlled through compliance with existing regulatory programs, so the impacts would be less than significant.

Moss Landing

Additional power generation at this facility could change the temperature of wastewater discharged into Elkhorn Slough. A listed species potentially at risk from increased thermal discharges would be the Santa Cruz long-toed salamander. However, as described in Section 4.4, Water, discharges from the plant would need to comply with the existing NPDES permit which regulates the quality of the discharge. Therefore, the impact is less than significant.

Combined Issues

As discussed above, PG&E currently has access to in-house biological and regulatory experts familiar with individual sites and the unique context of environmental protection at power stations. Important species and habitat at the plants could be threatened in the future if new owners were unaware of the presence and sensitivity of such biological resources. This could be a significant impact.

Mitigation Measures

- 4.7.a.1** PG&E shall provide each new owner, for the respective plant, with PG&E jurisdictional wetlands and special status species and habitats informational materials and training documents regarding resources associated with Morro Creek (Morro Bay) and the Moro Cojo and Elkhorn Sloughs (Moss Landing), to assist new owners in knowing the location of jurisdictional wetlands, special status species and habitats, and in meeting their legal obligations regarding endangered, threatened, or rare species or their habitats.

Monitoring Action: PG&E will provide the CPUC mitigation monitor with disclosure form signed by the new owner listing documents received to accomplish this condition.

Responsibility: CPUC
Timing: At least three business days prior to transfer of title of the plant(s)

Conclusion

With the incorporation of the above mitigation measure the impact of the project on endangered, threatened, or rare species or habitat would be less than significant.

b) Locally Designated Species

These species are defined for the purpose of this assessment as those *not* meeting the *CEQA Guidelines* criteria described above but of other public concern, i.e., plants or animals which have been identified for local protection or concern.

For plants with offshore discharge, it is possible that substantial changes in cooling water amounts or temperature could alter food chains which have developed during long term operation under relatively stable conditions. As noted previously, the discharge characteristics are regulated by permit conditions that would be passed on to new owners, so substantial changes are not anticipated. Minor changes to the discharges within permit conditions may have minor effects to locally important resources such as a recreational fishery but these effects are not considered significant.

Conclusion

No reasonably foreseeable significant effects are anticipated; therefore, impacts would be less than significant.

c) Locally Designated Natural Communities

Wetland resources at Elkhorn Slough and Moro Coho Slough are identified in the Monterey County General Plan and the North County Land Use Plan, and both are the subjects of extensive management plans and resources inventories. As discussed above, PG&E currently has access to in-house biological and regulatory experts familiar with individual sites and the unique context of environmental protection at power stations. Important species and habitat at the plants could be threatened in the future if new owners were unaware of the presence and sensitivity of such biological resources. This could be a significant impact.

Mitigation Measures

4.7.c.1 See mitigation measure 4.7.a.1. This information will include biological information for areas of locally designated concern at the Moss Landing and Morro Bay plants.

Conclusion

With implementation of the above mitigation, the impact on locally designated natural communities would be less than significant.

d) Wetland Habitat

The Morro Bay and Moss Landing facilities are likely to contain wetlands under the jurisdiction of the Corps or the CDFG. As discussed above, PG&E currently has access to in-house biological and regulatory experts familiar with the individual sites and the unique context of environmental protection at power stations. Important species and habitat at the plants could be threatened in the future if new owners were unaware of the presence and sensitivity of such biological resources. This could be a significant impact.

Mitigation Measures

See Mitigation Measure 4.7.a.1

Conclusion

With implementation of the above mitigation, the impact on jurisdictional wetlands would be less than significant.

e) Wildlife Dispersal and Migration Corridors

None of the power plants would be more obstructive to wildlife movements than is presently the case, given any reasonably foreseeable change in operation or use of the sites.

Conclusion

Because the project would not adversely affect wildlife dispersal and migration corridors, related impacts would be less than significant.