

Analysis of Fundamental Resources and Values

2.3 Threatened and Endangered Species – GGNRA supports a large number of federally Threatened and Endangered Species due to the confluence of unique and diverse habitats stressed by urbanization.

Importance of Resources and Values

The GGNRA protects a wide range of remnant, isolated, and fragmented habitats that are relatively rare in the broader San Francisco Bay Area because of underlying physical processes and the long history of human use. These rare habitats support a large number and diversity of taxa of endangered species, including plants, invertebrates, birds, mammals, fish, reptiles, and amphibians. Serpentine outcrops and bluffs provide habitat for Marin dwarf-flax and Presidio clarkia. Sandy beaches and dunes harbor San Francisco lessingia and western snowy plovers, with overwintering populations at Ocean Beach and the Wildlife Protection Area of Crissy Field. California brown pelicans do not breed this far north, but considerable numbers of this species spend a large part of the year in the coastal and estuarine areas of the park, with Bird Island and Rodeo Lagoon documented as important roosting and bathing sites. Functioning freshwater systems support California freshwater shrimp (Lagunitas and Olema Creeks), coho salmon (Lagunitas, Olema, Pine Gulch, and Redwood Creeks), steelhead (Lagunitas, Olema, Pine Gulch, Redwood, [Rodeo](#), Easkoot, and West Union Creeks). Tidewater gobies are found in Rodeo Lagoon and tributaries of Tomales Bay. California red-legged frogs inhabit wetlands along Redwood Creek, in Tennessee Valley, Rodeo Valley, Mori Point, and Milagra and Sweeney Ridges. San Francisco garter snakes inhabit wetlands and adjacent coastal grassland and scrub at Mori Point and potentially other suitable habitat in San Mateo County. Coastal scrub and grasslands at the Marin Headlands, Oakwood Valley, Fort Baker, and Milagra and Sweeney Ridges support Mission blue butterflies, while San Bruno elfin butterflies inhabit rocky outcrops at Milagra Ridge. Remnant old-growth coast redwood and mixed evergreen forest in Marin County provides habitat for a population of northern spotted owls. Coast redwood forest in Muir Woods, and potentially the Phleger Estate, has been identified as potential breeding habitat for marbled murrelets. The coastal and marine habitats within the park provide for the ecological needs and movements of rare and endangered migratory and resident marine species, including several species of whales, Steller's sea lions, southern sea otters, marbled murrelets and fish. The park also protects important habitats for state listed, designated sensitive, and locally rare species.

Current Conditions and Trends

The fragmented nature of park properties along the urban interface limits the total amount and quality of endangered species habitat, as well as connectivity with other populations regionally. Most of the lands within the park have been disturbed and altered by past agricultural or military activities. Invasive plants are common in some areas. The park has an extensive trail network and receives over 20 million visitors annually. The park has many roads, including major traffic arteries such as Highways 1 and 101, that pose a threat and alter movement patterns of endangered species.

GGNRA conducts regular inventory and monitoring work for the following endangered species: Presidio manzanita, Presidio clarkia, San Francisco lessingia, Marin dwarf-flax, California seablite, California freshwater shrimp, Mission blue butterflies, coho salmon, steelhead, northern spotted owls, western snowy plovers, red-legged frogs, and San Francisco garter snakes. About 40% of the park's threatened and endangered species (for which monitoring is conducted) were determined to have

stable or increasing populations this past year. Other endangered species population trends were unknown based on small and variable populations that in most cases were not monitored.

The park consults with United States Fish and Wildlife Service, NOAA/NMFS, and the California ~~Natural Diversity Database program~~ Department of Fish and Game related to any actions with the potential to adversely affect ~~federally and state-endangered-listed~~ species on parklands. The park is currently involved with planning or implementing habitat restoration and protection projects for San Francisco lessingia, Mission blue butterflies, coho salmon and steelhead trout, California red-legged frogs, San Francisco garter snakes, tidewater gobies, western snowy plovers and California brown pelicans.

Potential Threats

Threats to endangered species in Golden Gate National Recreation Area includes a number of broad categories - habitat fragmentation and continuing development outside the park, non-native animals, human disturbance and recreational impacts, domestic and feral animals, non-native plant invasion, environmental contaminants, and wildland fire. The spread of non-native plants threatens both endangered plants and some animals. Non-native species thrive in the park and in areas subject to intensive historic land use (grazing, military occupation) or adjacent to urbanized areas that are a constant source of weed invasion. Adverse impacts to hydrological processes and water quality threaten endangered marine, estuarine, and freshwater species. Wildlife diseases threaten some wildlife populations. Collecting is a problem for endangered butterflies and the San Francisco garter snake.

Stakeholders

Local and Regional Organizations:

Adjacent land management agencies, local universities, colleges, and school districts, non-profit community organizations, park partners, local and national conservation and community corps, and state and national environmental organizations.

Golden Gate National Parks Conservancy—provide support for natural resource stewardship, and their staff has taken a primary role in some projects enhancing endangered species habitat.

California Department of Fish and Game--

Golden Gate Audubon

PRBO Conservation Science—research organization, assists the park with many of our wildlife monitoring programs.

Salmon Protection and Watershed Network

User Groups

Park Volunteers—assist with endangered species monitoring and stewardship.

City of San Francisco—adjacent landowner.

Marin County Open Space—adjacent land owner.

National Organizations:

Government Agencies and Tribes:

Point Reyes National Seashore—adjacent park service unit, partner in several restoration and monitoring programs.

United States Fish and Wildlife Service

Educational and Cultural Institutions:

Regional research universities

Law and Policies:

Source:

Endangered Species Act (1973) as amended

Legal requirements:

Establishes USFWS and/or NOAA Fisheries as the lead agency for endangered species. Under Section 7, federal agencies must consult with USFWS/NOAA Fisheries for any actions that may adversely impact endangered species. Under Section 10, USFWS/NOAA Fisheries can issue federal agencies permits that authorize the take of endangered species for certain actions.

Source:

NPS *Management Policies 2001*; NPS-77 “Natural Resources Management Guideline”

Policy Direction:

- Cooperate with USFWS and NOAA/~~NMFS~~ Fisheries to ensure that actions comply with written requirement and the spirit of the ESA, including consultation, conferencing, informal discussions, and permitting.
- Ensure that park operations do not adversely impact endangered, threatened, candidate, or sensitive species and their critical habitat, within or outside the park.
- Undertake programs to inventory, monitor, restore, and maintain listed species’ habitats, and to implement research relevant to species recovery.
- Manage designated critical habitat, essential habitat and recovery areas to maintain and enhance their value for endangered species recovery.
- Cooperate with other agencies for species recovery.
- Participate in the recovery planning process.
- Cooperate with other agencies, states, and private entities to promote candidate conservation agreements aimed at precluding the need to list species.
- Conduct actions and allocate funding to address endangered species issues.
- The NPS will determine all management actions for the protection and perpetuation of federally, state, or locally listed species through appropriate planning and consultation with lead federal and state agencies.

Source:

National Parks Omnibus Management Act of 1998

Legal requirements:

Authorizes and directs the Secretary to: (1) assure that management of NPS units is enhanced by the availability and utilization of a broad program of the highest quality science and information; and (2) in partnership with other Federal and State agencies, enter into cooperative agreements with colleges and universities (including land grant schools) to establish cooperative study units to conduct multi-disciplinary research and develop integrated information products on the NPS resources or the larger region of which parks are a part. Directs the Secretary to: (1) report to specified congressional committees on progress in the establishment of a comprehensive network of such college and university based cooperative study units as will provide full geographic and topical coverage for research on the resources contained in NPS units and their larger regions; and (2) undertake a

program of inventory and monitoring of NPS resources to establish baseline information and to provide information on the long-term trends in their condition.

Issues

(Add issues once they have been explored with park staff and the public)