

3.15 WILDLIFE AND HABITAT

This section describes the existing physical affected environment and regulatory framework related to wildlife and habitat and discusses the potential effects of the EIS Alternatives related to wildlife and habitat.

3.15.1 Affected Environment

Existing-Resources Evaluation

The evaluation of existing resource conditions consisted of pre-field research, review of existing information, and field reconnaissance visits to the existing SFVAMC Fort Miley Campus and surrounding area.

Vegetation/Habitat Types

Existing SFVAMC Fort Miley Campus

The existing SFVAMC Fort Miley Campus is located along a bluff overlooking the northwestern edge of San Francisco and the Pacific Ocean. The existing Campus is bordered by the Golden Gate National Recreation Area (GGNRA) to the north, east, and west, and by the residential outer Richmond District neighborhood to the south. The Campus sits at an elevation of 300–350 feet relative to mean sea level, and is higher than the areas in its immediate vicinity. The land to the north and west of the site drops sharply downward toward the Pacific Ocean, while the terrain to the east slopes more gently through the Lincoln Park Golf Course and toward the Seacliff neighborhood (see Figures 1-1 and 1-2).

Reconnaissance-level biological surveys for special-status plant and wildlife species were conducted (in June and September 2008) of vegetated areas both on and adjacent to the SFVAMC Fort Miley Campus and in the area that surrounds the Campus.

Habitat within the SFVAMC Fort Miley Campus is largely developed and consists of landscaped and planted trees; however, the areas along the northern, eastern, and western perimeters of the Campus are less developed. The vegetation assemblages observed on the property in 2008 and 2012 by AECOM staff members were primarily nonnative and included a high-level tree canopy of Monterey pine (*Pinus radiata*) and Monterey cypress (*Cupressus macrocarpa*) (VA, 2010a). The year 2012 serves as the baseline year for this EIS.

As mentioned in Chapter 2.0, “Alternatives,” there are currently an estimated 232 trees within the landscaped portions of the Campus (VA, 2010b). Dominant tree species on the Campus include Monterey pine (71 individuals), purple leaf plum (*Prunus cerasifera* ‘*Atropurpurea*’; 25 individuals), Monterey cypress (21 individuals), Japanese flowering cherry (*Prunus serrulata*; 19 individuals), and Lagunaria (*Lagunaria patersonii*; 17 individuals). The remaining trees consist of small numbers of various nonnative and native trees used as landscaping throughout the Campus. Large nonnative tree¹ cover comprises about 30.2 acres (nearly 50 percent of the study area for wildlife and habitat). Cape ivy (*Delairea odorata*), a nonnative species, infested about 6.3 acres (or about 10 percent) of the study area.

¹ In the study, Monterey cypress and Monterey pine were considered “nonnative” because they are not historically native to the San Francisco Peninsula. Eucalyptus (*Eucalyptus globulus*) was the third most frequent nonnative tree species found.

Understory assemblages are dominated by English ivy (*Hedera helix*), German ivy (*Senecio mikanioides*), Himalayan blackberry (*Rubus discolor*), and passion flower (*Passiflora* sp.). Although both Monterey pine and Monterey cypress are species native to California, they are commonly planted as a landscape species and are not native to the San Francisco Peninsula. It was observed during previous surveys that open areas are relatively uncommon and dominated by nonnative annual grasses and invasive species. Native species are rare; however, California blackberry (*Rubus ursinus*) and coyote brush (*Baccharis pilularis*) were observed growing within the larger and more dominant thickets of Himalayan blackberry (VA, 2010a).

A portion of the existing SFVAMC Fort Miley Campus was also included in a floristic survey conducted on June 9, 2010, for the North Slope Seismic/Geologic Stabilization Project (North Slope Project) (VA, 2010c). Nonnative plant species, primarily Himalayan blackberry and ornamental trees, shrubs, vines, and herbaceous species, dominated vegetation on the slopes within the North Slope Project area. Like the surveys conducted in 2008 for the current project, the Environmental Assessment (EA) for the North Slope Project noted that California blackberry occurs where Himalayan blackberry, Monterey pine, and Monterey cypress are found. In the western portion of the North Slope Project area, small patches of arroyo willow (*Salix lasiolepis*) were found along the slope. There were some remnant coastal scrub species in the North Slope Project area, primarily California sagebrush (*Artemisia californica*), coyote bush, and bush lupine (*Lupinus arboreus*). However, these species were in the minority in both numbers and cover compared to the nonnative species. During the 2012 survey, it was noted that southern portions of the North Slope Project area had been developed into an ornamental garden containing an assemblage of native and nonnative flowering plants, including various clarkias (*Clarkia* spp.) and azaleas (*Rhododendron* spp.) (VA, 2012). There is no wetland habitat on the Campus.

Mission Bay Area

Mission Bay is an urban area that was developed for industrial uses including rail yards, truck terminals, construction-related operations, warehouses, and maritime activities. Development has occurred in the area, but vacant areas remain. Open areas of Mission Bay are vegetated predominantly with nonnative, annual species of grasses and forbs. The Mission Bay planning area encompasses the entire Mission Creek Channel (Figure 2-5 in Chapter 2.0, “Alternatives”). A minor amount of wetland vegetation in the form of a fringe of pickleweed (*Salicornia virginica*) occurs above the high-tide line on the unlined, dirt banks of the Mission Creek Channel. Nonnative annual grasses and forbs common to disturbed urban areas occur on the channel sides above the pickleweed. For the 1996 LRDP EIR, potential new sites were surveyed on foot to assess the potential for occurrence of sensitive species.

Wildlife typical of the Mission Bay area includes domesticated rock dove (*Columba livia*) and Muscovy duck (*Cairina moschata*), and common native bird species including mourning dove (*Zenaida macroura*), mallard (*Anas platyrhynchos*), and killdeer (*Charadrius vociferous*). Other species of native water birds would be expected to occur along the Mission Creek Channel, including gulls, egrets, herons, and ducks.

Because of the Mission Bay area’s history of development and industrial uses, only limited to no natural vegetation or habitat communities remain in the area. Waterfront in this area is generally developed and contains riprap, seawalls, or other development to control tidal influence from San Francisco Bay. This development limits the use of any shoreline wildlife in the area. According to the draft Environmental Impact Report prepared for the *Natural Areas Management Plan* (SF Planning, 2011), there are no natural areas in the Mission Bay area.

Federally Listed Plant Species

Existing SFVAMC Fort Miley Campus

Because the EIS Alternative selected would be undertaken by a federal agency on federally owned property, only federally protected species are subject to review. Information about federally listed plant species with potential to occur at the SFVAMC Fort Miley Campus was compiled by performing database searches of the following sources:

- The U.S. Fish and Wildlife Service's (USFWS's) database of federally listed endangered and threatened species (USFWS, 2011)
- The California Natural Diversity Database (CNDDDB) (2012a), maintained by the California Department of Fish and Wildlife (CDFW) (formerly known as the California Department of Fish and Game [DFG])
- The California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Vascular Plants (CNPS, 2010)

Overall, the queries resulted in a list of seven federally listed plant species (Table 3.15-1) with known or historic occurrences in the surrounding area. Because of dense urbanization and development, these federally listed plant species are generally limited to the Presidio and GGNRA lands, and these populations are now often carefully managed and protected. Typical habitat requirements for these species are often very specialized and include serpentine-derived soils or outcrops, chaparral, coastal scrub, sand dunes, wetlands, and native grasslands. Generally, these habitats are absent from the SFVAMC Fort Miley Campus or are severely degraded.

As mentioned above, remnant coastal scrub habitat is present in the northern undeveloped area of the SFVAMC Fort Miley Campus; however, the habitat is largely dominated by nonnative species and therefore is generally low-quality habitat for listed plant species. Aside from this area, none of the aforementioned habitats (serpentine-derived soils or outcrops, chaparral, coastal scrub, sand dunes, wetlands, and native grasslands) were observed on the remainder of the Campus (VA, 2010a). Although some of these habitats historically existed on the Campus, the significant development and landscaping that have occurred on the Campus over time (over 100 years, whether by VA or by U.S. Army in prior years) have eliminated natural habitats (VA, 2010a).

No federally listed plants were observed on or immediately adjacent to the SFVAMC Fort Miley Campus during previous field surveys. Furthermore, other recent SFVAMC EAs have also concluded that no federally listed or special-status plants were observed during appropriately timed plant surveys, and no federally listed or special-status plants are expected to occur because of the dominance and density of nonnative vegetation or the developed and disturbed nature of the area (VA, 2010c, 2011a, and 2011b). Because of the lack of suitable habitat, no federally listed plant species are anticipated to be present on the Campus.

Mission Bay Area

Because the Mission Bay area is heavily developed and/or otherwise previously disturbed, no natural vegetation communities are present that could support federally listed plant species known to occur in the San Francisco area. Table 3.15-1 provides a summary of these species. No extant populations of federally listed plants are known to persist in the Mission Bay area.

Table 3.15-1: Federally Listed Plant Species Potentially Occurring near the Existing SFVAMC Fort Miley Campus and the Mission Bay Area

Plants	Species	USFWS ¹	Habitat	Potential for Occurrence— SFVAMC Fort Miley Campus	Potential for Occurrence—Mission Bay Area
Franciscan manzanita	<i>Arctostaphylos franciscana</i>	PE	Serpentine maritime chaparral Bloom: February–April	Low: Limited habitat exists on the property. This species is only known to exist in a small number of select and managed locations within the Presidio, and thus, is unlikely to occur within the SFVAMC Fort Miley Campus.	None: No suitable habitat is present in the Mission Bay area.
Presidio manzanita	<i>Arctostaphylos hookeri</i> ssp. <i>ravenii</i>	E	Chaparral, coastal prairie, coastal scrub/serpentine chaparral Bloom: February–March	Low: Low-quality habitat exists on the property to the north of the developed area. Because only one population of the species is presumed extant (in the Presidio), it is unlikely that this species would be present (CNDDDB, 2012a).	None: No suitable habitat is present in the Mission Bay area.
Marsh sandwort	<i>Arenaria paludicola</i>	E	Marshes and swamps (freshwater or brackish), sandy openings Bloom: May–August	None: No suitable habitat is present on the SFVAMC Fort Miley Campus. This species is believed to be extirpated from San Francisco (CNDDDB, 2012a).	None: No suitable habitat is present in the Mission Bay area.
Presidio clarkia	<i>Clarkia franciscana</i>	E	Coastal scrub, valley and foothill grassland/ serpentine soils Bloom: May–July	Low: No suitable serpentine grasslands are present on the SFVAMC Fort Miley Campus. Only two extant populations persist in San Francisco, neither of which is located near the Campus (CNDDDB, 2012a).	Low: Some serpentine soils are present in the Mission Bay area; however, no development would occur in these areas.
Marin western flax	<i>Hesperolinon congestum</i>	T	Chaparral, valley and foothill grassland; serpentine soils Bloom: April–July	Low: No suitable habitat for the species is present on the SFVAMC Fort Miley Campus.	None: No suitable habitat is present in the Mission Bay area.
Beach layia	<i>Layia carnosa</i>	E	Coastal dunes, coastal scrub/ sandy soils Bloom: April–July	None: No suitable habitat for the species is present on the SFVAMC Fort Miley Campus.	None: No suitable habitat is present in the Mission Bay area.

Table 3.15-1: Federally Listed Plant Species Potentially Occurring near the Existing SFVAMC Fort Miley Campus and the Mission Bay Area

Plants	Species	USFWS¹	Habitat	Potential for Occurrence— SFVAMC Fort Miley Campus	Potential for Occurrence—Mission Bay Area
San Francisco lessingia	<i>Lessingia germanorum</i>	E	Coastal scrub/remnant dunes Bloom: June–November	Low: Habitat on the SFVAMC Fort Miley Campus is not characteristic of habitats where this species is generally found.	None: No suitable habitat is present in the Mission Bay area.
White-rayed pentachaeta	<i>Pentachaeta bellidiflora</i>	E	Cismontane woodland, valley and foothill grassland/often serpentine Bloom: March–May	None: This species is only known to exist in a small number of locations containing serpentine grasslands along the San Francisco Peninsula in San Mateo County (CNDDDB, 2012a).	None: This species is only known to exist in a small number of locations containing serpentine grasslands along the San Francisco Peninsula in San Mateo County (CNDDDB, 2012a).

Notes:

¹ Listing status under the federal Endangered Species Act: PE = Proposed Endangered; E= Endangered; T =Threatened

Sources: CNDDDB, 2012a; CNPS, 2010; USFWS, 2011a and 2011b

Federally Listed Wildlife Species and Migratory Birds

Existing SFVAMC Fort Miley Campus

The close proximity to urbanization and the highly disturbed nature of the existing SFVAMC Fort Miley Campus greatly reduces the potential for the presence of federally listed wildlife species at the Campus. Only common wildlife such as red-tailed hawk (*Buteo jamaicensis*) was observed during the 2008 surveys (VA, 2010a). Similarly, no federally listed wildlife species or migratory birds were noted in several other EAs prepared for various projects at the Campus (VA, 2010c, 2011a, and 2011b).

Information about federally listed wildlife species with potential to occur within the San Francisco North 7.5-minute Quadrangle was compiled by performing database searches of the CNDDDB (2012a) and the USFWS (2011a) database of federally endangered and threatened species.²

Overall, the queries identified 28 federally listed species of animals. Table 3.15-2 provides a summary of the potential for federally listed wildlife to occur on the SFVAMC Fort Miley Campus. Of the 28 species identified by the queries conducted, 20 are pelagic or marine, or otherwise live in open water, which is not present in the vicinity of the SFVAMC Fort Miley Campus. Therefore, only terrestrial species known to occur in San Francisco have been included in Table 3.15-2.

Mission Bay Area

Because of the relatively developed nature of the Mission Bay area and its associated waterfront on San Francisco Bay, no suitable habitat for federally listed species is present. A small patch of saltmarsh habitat (mainly pickleweed) is present along the Mission Creek Channel; however, this area is too small and isolated to act as a suitable refuge for federally listed wildlife species and attract species such as California clapper rail and/or salt marsh harvest mouse. Table 3.15-2 provides a summary of the potential for federally listed wildlife to occur in the Mission Bay area.

Other Species of Special Regional Concern

Existing SFVAMC Fort Miley Campus

The presence of trees and shrubs on and adjoining the existing SFVAMC Fort Miley Campus and the Campus's location along the Pacific Flyway create the likelihood for various migratory birds to exist in the area. Raptors and other native birds are protected under the federal Migratory Bird Treaty Act (MBTA), discussed below in Section 3.15.2, "Regulatory Framework." As noted above, a red-tailed hawk was observed perching in the trees around the Campus. Other raptors that may be present include sharp-shinned hawk (*Accipiter striatus*), red-shouldered hawk (*Buteo lineatus*), and American kestrel (*Falco sparverius*). It is unlikely that these species nest at the site because of the activity on the property; however, nesting may occur within the GGNRA lands bordering the Campus.

² Because the selected EIS Alternative would be undertaken by a federal agency on federally owned property, only federally protected species are subject to review.

Table 3.15-2: Federally Listed Animal Species Potentially Occurring near the Existing SFVAMC Fort Miley Campus and the Mission Bay Area

Species	USFWS ¹	Habitat	Potential for Occurrence— SFVAMC Fort Miley Campus	Potential for Occurrence—Mission Bay Area	
Invertebrates					
Bay checkerspot butterfly	<i>Euphydryas editha bayensis</i>	T	San Francisco Peninsula to southern Santa Clara County; dependent on dwarf plantain (<i>Plantago erecta</i>) and purple owl's clover (<i>Castilleja densiflorus</i> or <i>C. exserta</i>), which grow on serpentine soil	None: No suitable habitat or required host plants are present on the property.	None: No suitable habitat or required host plants are present in the Mission Bay area.
Mission blue butterfly	<i>Icaricia icarioides missionensis</i>	E	Coastal chaparral and coastal grassland within San Francisco Bay region; larvae feed on lupine (<i>Lupinus</i> sp.) species and adults feed on a variety of plant species	None: No suitable habitat or required host plants are present on the property.	None: No suitable habitat or required host plants are present in the Mission Bay area.
Callippe silverspot butterfly	<i>Speyeria callippe callippe</i>	E	Grassland habitat bordering San Francisco Bay; dependent on California golden violet (<i>Viola pedunculata</i>)	None: No suitable habitat or required host plants are present on the property.	None: No suitable habitat or required host plants are present in the Mission Bay area.
Amphibians					
California red-legged frog	<i>Rana draytonii</i>	T	Lowlands and foothills with permanent sources of deep water with dense emergent vegetation; disperse through upland habitat	None: No suitable breeding or upland habitat is present on the property or in the surrounding area. This species has not been observed in the area since 1972 and is believed to be extirpated.	None: No suitable breeding or upland habitat is present in the Mission Bay area.

Table 3.15-2: Federally Listed Animal Species Potentially Occurring near the Existing SFVAMC Fort Miley Campus and the Mission Bay Area

Species		USFWS ¹	Habitat	Potential for Occurrence— SFVAMC Fort Miley Campus	Potential for Occurrence—Mission Bay Area
Birds					
California clapper rail	<i>Rallus longirostris obsoletus</i>	E	San Francisco Bay Area salt marsh; highly dependent on dense vegetation cover dominated by pickleweed and cordgrass	None: No salt marsh habitat is present on the property.	Low: Small patches of salt marsh habitat are present along Mission Creek Channel; however, these areas are too small and isolated from larger habitat areas to support the species.
California least tern	<i>Sterna antillarum browni</i>	E	Coastal waters with open sandy beaches or banks	None: No suitable breeding or foraging habitat is present on the property.	Low: The Mission Bay area borders San Francisco Bay, which contains potential low-quality foraging habitat; however, no beaches or other potential breeding habitat are present in the area.
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	T	Coastal and inland sand dunes or other sandy substrates	None: No suitable breeding or foraging habitat is present on the property.	Low: The Mission Bay area borders San Francisco Bay, which contains potential low-quality foraging habitat; however, no beaches or other potential breeding habitat are present in the area.
Mammals					
Salt marsh harvest mouse	<i>Reithrodontomys raviventris</i>	E	San Francisco Bay Area salt marsh; highly dependent on dense vegetation cover dominated by pickleweed	None: No suitable breeding or foraging habitat is present on the property.	Low: Small patches of salt marsh habitat are present along the Mission Creek Channel; however, these areas are too small and isolated from larger habitat areas to support the species.

Notes:

¹ Listing status under the federal Endangered Species Act: PE = Proposed Endangered; E= Endangered; T =Threatened

Sources: CNDDDB, 2012a; CNPS, 2010; USFWS, 2011a and 2011b

The species described below have been reported near the existing SFVAMC Fort Miley Campus (Table 3.15-3), and although they are not federally listed, they could become candidate species for listing under the federal Endangered Species Act (ESA).³

- Western pond turtle (*Emys marmorata*) is known to occur within Golden Gate Park, approximately 2 miles south of the SFVAMC Fort Miley Campus (CNDDDB, 2012b). The western pond turtle is considered by DFG (CDFW) to be a species of concern (CNDDDB, 2012b). This species is not expected to occur on the SFVAMC Fort Miley Campus because there are no aquatic features within or adjacent to the Campus.
- Western red bat (*Lasiurus blossevillii*) is known to occur in Golden Gate Park, approximately 2 miles south of the Campus (CNDDDB, 2012b). The western red bat is considered by DFG (CDFW) to be a species of concern (CNDDDB, 2012b). Western red bats roost in trees and other dense foliage and have the potential to utilize native and nonnative trees within and surrounding the Campus.
- One record of bank swallow (*Riparia riparia*) was noted along the shore cliffs approximately 1 mile southwest of the SFVAMC Fort Miley Campus (CNDDDB, 2012b). This record is from the 1960s and the species is presumed extant. The bank swallow typically nests in burrows in vertical banks, cliffs, and bluffs near a water source. The Campus does not contain any cliff or bank habitat and does not provide appropriate habitat for foraging. Bank swallows are not expected to occur at the Campus.
- Several CNPS-listed plant species and two DFG (CDFW)–listed plant species have known occurrences near the Campus; however, many of these occurrences are believed to have been extirpated. With the exception of three species—San Francisco Bay spineflower (*Chorizanthe cuspidata* var. *cuspidata*), Franciscan thistle (*Cirsium andrewsii*), and Kellogg’s horkelia (*Horkelia cuneata* var. *sericea*)—the species all have low to no potential to occur on the Campus.

Mission Bay Area

Because of a lack of suitable habitat, no other species of special regional concern occur in the Mission Bay area.

Habitat Linkages and Corridors

Wildlife movement includes migration (usually one direction per season), interpopulation movement (e.g., long-term genetic exchange), and small travel pathways (e.g., daily movement corridors within an animal’s territory). Small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators; they also provide connections between outlying populations, permitting gene flow between populations, thereby buffering against the adverse effects of small population sizes.

By definition, habitat fragmentation is an event that creates a greater number of habitat patches that are smaller than the original contiguous tract(s) of habitat. Fragmentation of primary habitat types can hinder local and/or regional wildlife movements.

³ Because of the 10.5-year time frame of implementation of the selected EIS Alternative, the listing status of these species could change, with the species potentially becoming listed.

Table 3.15-3: Special-Status Plant Species Potentially Occurring near the Existing SFVAMC Fort Miley Campus

Species		Status ¹		Habitat	Potential for Occurrence
		DFG (CDFW)	CNPS		
Alkali milkvetch	<i>Astragalus tener</i> var. <i>tener</i>	–	1B	Playas, valley and foothill grassland/adobe clay, vernal pools/alkaline Bloom: March–June	None: Habitat on the property is not likely to support species. Occurrence in Potrero Hill possibly extirpated (CNDDDB, 2012b).
Bristly sedge	<i>Carex comosa</i>	–	2	Coastal prairie, marshes and swamps/lake margins, valley and foothill grassland Bloom: May–September	None: Habitat on the property is not likely to support species. Occurrence possibly extirpated (CNDDDB, 2012b).
San Francisco Bay spineflower	<i>Chorizanthe cuspidate</i> var. <i>cuspidata</i>	–	1B	Coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub Bloom: April–August	Moderate: Limited habitat exists on the property. One population possibly extirpated and two other presumed extant, including one in the Presidio (CNDDDB, 2012b).
Franciscan thistle	<i>Cirsium andrewsii</i>	–	1B	Broadleaf upland forest, coastal bluff scrub, coastal prairie, coastal scrub Bloom: March–July	Moderate: Limited habitat exists on the property. One population presumed extant in the Presidio (CNDDDB, 2012b).
Round-headed Chinese houses	<i>Collinsia corymbosa</i>	–	1B	Coastal dunes Bloom: April–June	Low: Habitat on the property is not likely to support species. One population presumed extant in the Presidio (CNDDDB, 2012b).
San Francisco collinsia	<i>Collinsia multicolor</i>	–	1B	Closed-cone coniferous forest, coastal scrub/sometimes serpentinite Bloom: March–May	Low: Habitat on the property is not likely to support species. One population presumed extant in Glen Park (CNDDDB, 2012b).
Point Reyes bird's beak	<i>Cordylanthus maritimus</i> ssp. <i>palustris</i>	–	2	Marshes and swamps, coastal salt marsh Bloom: June–October	None: No suitable habitat on the property. One transplanted population presumed extant in the Presidio (CNDDDB, 2012b).
Fragrant fritillary	<i>Fritillaria liliacea</i>	–	1B	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland/often serpentinite Bloom: March–February	None: Habitat on the property is not likely to support species. One population possibly extirpated and one presumed extant on Twin Peaks (CNDDDB, 2012b).
Blue coast (Dune) gilia	<i>Gilia capitata</i> ssp. <i>chamissonis</i>	–	1B	Coastal dunes, coastal scrub Bloom: April–July	None: Habitat on the property is not likely to support species. Two presumed extant populations are located in the Presidio and Lands End (CNDDDB, 2012b).

Table 3.15-3: Special-Status Plant Species Potentially Occurring near the Existing SFVAMC Fort Miley Campus

Species	Species	Status ¹		Habitat	Potential for Occurrence
		DFG (CDFW)	CNPS		
Dark-eyed gilia	<i>Gilia millefoliata</i>	–	1B	Coastal dunes Bloom: April–July	None: Habitat on the property is not likely to support species. Occurrence possibly extirpated (CNDDDB, 2012b).
San Francisco gumplant	<i>Grindelia hirsutula</i> var. <i>maritima</i>	–	1B	Coastal bluff scrub, coastal scrub, valley and foothill grassland/sandy or serpentine Bloom: June–September	Low: Habitat on the property is not likely to support species. Several populations presumed extant (CNDDDB, 2012b).
Kellogg’s horkelia	<i>Horkelia cuneata</i> ssp. <i>sericea</i>	–	1B	Closed-cone coniferous forest, chaparral/maritime, coastal dunes, coastal scrub/sandy or gravelly openings Bloom: April–September	Moderate: Limited habitat exists on the property. Two populations (one transplanted) presumed extant (CNDDDB, 2012b).
Rose leptosiphon	<i>Leptosiphon rosaceus</i>	–	1B	Coastal bluff scrub Bloom: April–July	Low: Habitat on the property is not likely to support species. Population possibly extirpated (CNDDDB, 2012b).
Marsh microseris	<i>Microseris paludosa</i>	–	1B	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland Bloom: April–July	Low: Habitat on the property is not likely to support species. Occurrence extirpated (CNDDDB, 2012b).
Choris’ popcorn-flower	<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>	–	1B	Chaparral, coastal prairie, coastal scrub/mesic Bloom: March–June	None: Habitat on the property is not likely to support species. Population in Golden Gate Park presumed extant (CNDDDB, 2012b).
San Francisco popcorn-flower	<i>Plagiobothrys diffusus</i>	E	1B	Coastal prairie, valley and foothill grassland Bloom: March–June	None: Habitat on the property is not likely to support species. One population in the Presidio presumed extant (CNDDDB, 2012b).
Hairless popcorn-flower	<i>Plagiobothrys glaber</i>	–	1A	Meadows and seeps/alkaline, marshes and swamps/coastal salt Bloom: March–May	None: No suitable habitat on the property. This occurrence is extirpated (CNDDDB, 2012b).
Adobe sanicle	<i>Sanicula maritima</i>	R	1B	Chaparral, coastal prairie, meadows and seeps, valley and foothill grassland/clay/serpentinite Bloom: February–May	Low: Habitat on the property is not likely to support species. Historical occurrence in Potrero Hill possibly extirpated (CNDDDB, 2012b).

Table 3.15-3: Special-Status Plant Species Potentially Occurring near the Existing SFVAMC Fort Miley Campus

Species	Status ¹		Habitat	Potential for Occurrence
	DFG (CDFW)	CNPS		
San Francisco campion <i>Silene verecunda</i> ssp. <i>verecunda</i>	–	1B	Coastal bluff scrub, chaparral, coastal prairie, coastal scrub, valley and foothill grassland/sandy Bloom: March–August	Low: Habitat on the property is not likely to support species. Occurrence in the Presidio presumed extant as well as two transplanted populations to the Presidio (CNDDDB, 2012b).
Santa Cruz microseris <i>Stebbinsoseris decipiens</i> / <i>Microseris decipiens</i>	–	1B	Broadleaf upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland/open areas/sometime serpentinite Bloom: April–May	None: Habitat on property is not likely to support species. Only known occurrence is from Angel Island and is presumed extant (CNDDDB, 2012b).
San Francisco owl's clover <i>Triphysaria floribunda</i>	–	1B	Coastal prairie, coastal scrub, valley and foothill grassland/usually serpentinite Bloom: April–June	Low: Habitat on the property is not likely to support species. Potrero Hill occurrence extirpated, but two populations in the Presidio presumed extant (CNDDDB, 2012b).
Coastal triquetrella (moss) <i>Triquetrella californica</i>	–	1B	Coastal bluff scrub, coastal scrub/soil Bloom: Not listed	Low: Habitat on property is not likely to support species. The one occurrence is presumed extant on Clarendon Heights (CNDDDB, 2012b).

Notes:

¹ Legal Status Definitions

DFG (CDFW) = California Department of Fish and Game, now California Department of Fish and Wildlife (the agency's name changed in January 2013)
 CNPS = California Native Plant Society

California Department of Fish and Game (California Department of Fish and Wildlife)
State Listing Categories

E = Endangered

T = Threatened

R = Rare

Sources: CNDDDB, 2012b; CNPS, 2010

California Native Plant Society Categories

1A= Plant species presumed extinct in California

1B= Plant species considered rare or endangered in California and elsewhere (but not legally protected under federal Endangered Species Act [ESA] or California Endangered Species Act [CESA])

2= Plant species considered rare or endangered in California but more common elsewhere (not protected under ESA or CESA)

3= More information is needed to define status (Under review)

Existing SFVAMC Fort Miley Campus

The SFVAMC Fort Miley Campus is located adjacent to GGNRA lands that act as a migratory corridor or stopover for birds moving north and south along California's coast, including from areas of Marin and San Mateo Counties. Although the Campus itself contains limited or marginal habitat to support migratory birds, it is crossed by wildlife moving through the San Francisco area.

Mission Bay Area

Because limited natural habitat is present in the Mission Bay area, the area does not contain the habitat that would be attractive for stopovers used by wildlife (primarily birds) migrating along San Francisco Bay. It is anticipated that wildlife migrating through eastern San Francisco would bypass the Mission Bay area.

3.15.2 Regulatory Framework

Endangered Species Act

Under the ESA, the Secretary of the Interior (represented by USFWS) and the Secretary of Commerce (represented by the National Marine Fisheries Service) have joint authority to list a species as threatened or endangered. USFWS has jurisdiction over plants, wildlife, and resident fish, while the National Marine Fisheries Service has jurisdiction over anadromous fish and marine fish and mammals.

Section 9 of the ESA prohibits the "take" of federally listed species. Take is defined under the ESA (Section 3[19]), in part, as killing, harming, or harassment of such species. USFWS defines "harm" to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. USFWS defines "harass" as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns that include but are not limited to breeding, feeding, or sheltering.

All federal agencies are to protect species and preserve their habitats. Section 7 of the ESA says that federal agencies such as VA must utilize their authorities to conserve listed species and make sure that their actions do not jeopardize the continued existence of listed species. Therefore, VA must analyze potential impacts on federally listed species of all of its actions, including the EIS Alternatives.

Migratory Bird Treaty Act

The MBTA, as amended, makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued by USFWS. The MBTA does protect the habitat of migratory birds. Permits are issued to qualified applicants for only the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, educational, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal.

Federal agencies such as VA are required to comply with federal laws, including the MBTA; thus, VA must analyze the potential impacts on migratory birds of all of its actions, including the EIS Alternatives.

3.15.3 Environmental Consequences

Significance Criteria

A NEPA evaluation must consider the context and intensity of the environmental effects that would be caused by, or result from, the EIS Alternatives. The Council on Environmental Quality's national guidance suggests that direct and indirect effects and their significance be discussed. These effects are defined below. Effects may also include those resulting from actions, which may have both beneficial and detrimental effects:

- (a) Direct effects are caused by the action and occur at the same time and place.
- (b) Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.

An Alternative analyzed in this EIS is considered to result in an adverse impact on wildlife and habitat if its direct effects would:

- cause disruption to or removal of an endangered or threatened species, its habitat, migration corridors, or breeding areas; or
- result in the loss of a substantial number of native plant or animal species that could affect abundance or diversity beyond normal variability.

In addition, an Alternative analyzed in this EIS is considered to result in an adverse impact on wildlife and habitat if it would substantially cause the following indirect effects:

- increased noise levels that could disrupt the behavior of sensitive animals,
- increased urban runoff on downstream plant communities and sensitive plant populations, or
- exotic species invasions into native communities.

Assessment Methods

This section analyzes the potential effects of the EIS Alternatives on biological resources, specifically wildlife and habitat. For purposes of this analysis, it is assumed that all the biological resources within the footprint of each Alternative would be permanently, directly affected (i.e., these resources would be displaced by development). Therefore, there is no analysis for temporary direct or indirect effects on on-site resources. All indirect effects from the Alternatives would be limited to biological resources adjacent to the development footprint. Temporary indirect effects would arise from construction activities, while permanent indirect effects would arise from the ongoing operation of the Alternatives.

Areas with the potential to support federally listed species were evaluated at two levels. Pursuant to the ESA, the EIS Alternatives were evaluated to determine a finding of either "no effect" or "may effect" on listed species. In addition, pursuant to NEPA, the habitats that could potentially support federally listed species were evaluated to determine whether the EIS Alternatives would result in an "adverse impact" on these habitats.

Alternative 1: SFVAMC Fort Miley Campus Buildout Alternative

Short-Term Projects

Construction

Alternative 1 short-term projects would involve construction of 17 projects over 7 years, with completion anticipated by August 2020. Alternative 1 short-term projects would involve construction of 600,992 gross square feet (gsf) (384,452 of which would be net new) at the existing SFVAMC Fort Miley Campus. These short-term projects would involve construction on 0.69 acre of the existing Campus for an estimated total duration of 85 months. All construction staging would occur on the Campus itself, in previously disturbed areas.

Vegetation/Habitat

During construction of Alternative 1 short-term projects, approximately 65 of the estimated 232 trees on-site (largely Monterey pine, Monterey cypress, purple leaf plum, and plume albizia individuals) would be removed because of their potential for tree-fall and limb breakage hazards identified in previous tree surveys. In addition, approximately five trees would be removed along the eastern edge of the SFVAMC Fort Miley Campus to accommodate construction of Buildings 22 and 24. In some areas, removed trees would be replaced with tree species more adapted to the windy conditions at the Campus. Specifically, trees would be planted along internal circulation roads, in surface parking lots, and near the two Campus entrances.

For the purposes of this analysis, it is assumed that a significant portion of the understory would be removed as part of Alternative 1 short-term projects. Removal of landscape species such as Monterey pine and Monterey cypress and the understory would not constitute an adverse impact on vegetation and habitats because these species are not native to the area. This direct impact would be minor. See the analysis under “Other Species of Special Regional Concern” below for a discussion of the effects of vegetation removal on migratory bird and bat species. Activities for Alternative 1 short-term projects would comply with VA Specification Section 015719, “Temporary Environmental Controls” (see Section 3.8, “Hydrology and Water Quality”) and with the San Francisco Public Works Code, Construction General Permit; therefore, no indirect effects on off-site vegetation and habitat would result from an increase in urban runoff. The existing landscaping would be replaced with similar vegetation. Because the existing and proposed landscaped vegetation on the Campus is not invasive, no exotic species are expected to invade the neighboring GGNRA lands. Therefore, no direct or indirect impacts on vegetation and habitat would result from construction of Alternative 1 short-term projects.

Federally Listed Plant Species

All of the plant species listed in Table 3.15-1 have low to no potential of occurrence on the SFVAMC Fort Miley Campus. In addition, recent SFVAMC EAs have stated that no federally listed plant species were observed on the existing Campus. Furthermore, no federally listed species were observed during the 2008 or 2012 field surveys. As a result, no direct construction-related impacts on federally listed plants are anticipated to result from construction of Alternative 1 short-term projects. In addition, no indirect effects on federally listed plants in the adjacent area are anticipated.

Federally Listed Wildlife Species

No suitable habitat for federally listed wildlife is present on the SFVAMC Fort Miley Campus. Thus, no direct construction-related impacts on federally listed wildlife species are anticipated to result from construction of Alternative 1 short-term projects. In addition, no indirect effects on federally listed wildlife species in the surrounding area are anticipated.

Other Species of Special Regional Concern

Vegetation removal during construction of Alternative 1 short-term projects could result in potentially adverse effects on other species of special regional concern. Specifically, construction activities such as tree removal have the potential to affect nesting birds protected under the MBTA, or to affect the western red bat. Vegetation removal conducted during the avian nesting season (approximately February through August) could adversely affect nesting birds and bats using the area. Vegetation removal conducted outside of the nesting season would be considered a short-term adverse impact on bird species and bats that use the vegetation on the existing SFVAMC Fort Miley Campus. However, implementing Mitigation Measure WH-1 would reduce any potential impact by requiring wildlife surveys and avoidance of the breeding season.

Mitigation Measure WH-1: Conduct Wildlife Surveys and Avoid Vegetation Removal During the Breeding Season for Nesting Birds and Bats

SFVAMC will implement the following measures to avoid potential effects on nesting birds and bats, should potential nesting or roosting habitat be identified within 150 feet of the proposed development area:

- *Removal of shrubs, trees, or any vegetative cover will be conducted outside of the breeding season, roughly from September to January 31 (breeding season is typically February through August).*
- *Should vegetation removal be required during the breeding season (approximately March through August), a qualified biologist will conduct a survey for native nesting birds and bats no earlier than 14 days before the removal of trees, shrubs, or buildings. The biologist will determine the time period that the results will remain valid, based on the seasonal timing. The area surveyed will include all locations of vegetation or building removal, as well as areas within 150 feet.*
- *If no active nests or roosts are found, no further action is required. If an active nest or roost is discovered in the areas to be cleared, or in other habitats within 150 feet of construction boundaries, clearing and construction will be postponed for at least 2 weeks or until a wildlife biologist has determined that the young have left the nest or roost, the nest or roost is vacated, and there is no evidence of second nesting attempts.*

The construction period for Alternative 1 short-term projects is anticipated to be approximately 7 years and 1 month (85 months). Therefore, it may be necessary to implement the aforementioned measures repeatedly during this time frame. Implementation of Mitigation Measure WH-1 would reduce this impact to a minor level.

Habitat Linkages and Corridors

The SFVAMC Fort Miley Campus does not contain habitat used by any species as a linkage or corridor, and construction of the Alternative 1 short-term projects would not result in changes to surrounding linkages and corridors. Therefore, no impacts on habitat linkages or corridors would occur.

Operation*Vegetation/Habitat*

No effects on vegetation and habitat would result from operation of Alternative 1 short-term projects. Because the footprint of operations at the SFVAMC Fort Miley Campus would remain generally the same, the condition of surrounding habitat is not anticipated to change or become degraded. Therefore, no direct or indirect impacts on vegetation and habitat would occur.

Federally Listed Plant Species

No federally listed plant species occur on the existing SFVAMC Fort Miley Campus; thus, no effects on federally listed plant species would result from operation of Alternative 1 short-term projects. Therefore, no direct or indirect impacts on federally listed plant species would occur.

Federally Listed Wildlife Species

No federally listed wildlife species occur on the existing SFVAMC Fort Miley Campus; thus, no effects on federally listed wildlife species would result from operation of Alternative 1 short-term projects. Therefore, no direct or indirect impacts on federally listed wildlife species would occur.

Other Species of Special Regional Concern

No species of regional concern occur on the existing SFVAMC Fort Miley Campus; thus, no effects on other species of regional concern would result from operation of Alternative 1 short-term projects. Therefore, no direct or indirect impacts on other species of special regional concern would occur.

Habitat Linkages and Corridors

Operation of Alternative 1 short-term projects would not result in changes to the overall quality or quantity of surrounding habitat use by species as linkages and corridors. Therefore, no direct or indirect impacts on these surrounding linkages and corridors would occur.

Long-Term Projects**Construction**

The Alternative 1 long-term project would involve construction of approximately 170,000 net new gsf on 0.25 acre of previously disturbed area within the existing SFVAMC Fort Miley Campus over an estimated total duration of approximately 2 years.

Vegetation/Habitat

All construction staging for Alternative 1 short-term projects would occur on the SFVAMC Fort Miley Campus itself, in previously disturbed areas, and would result in limited effects on natural vegetation or wildlife habitat. In addition, tree removal would be conducted primarily during implementation of the short-term projects for Alternative 1, thus reducing the potential effects of the long-term project for this alternative on vegetation. Although some vegetation removal may be necessary, the vegetation that would be removed is primarily ornamental and unlikely to support local wildlife. Therefore, no direct or indirect impacts related to vegetation and habitat would result from construction of the Alternative 1 long-term project.

Federally Listed Plant Species

All of the plant species listed in Table 3.15-1 have low to no potential for occurrence on the SFVAMC Fort Miley Campus. In addition, recent SFVAMC EAs have stated that federally listed plant species were not observed on the existing Campus. Furthermore, no federally listed species were observed during 2008 or 2012 field surveys. As a result, no direct impacts on federally listed plants are anticipated to result from construction of Alternative 1 long-term projects. Similarly, no indirect impacts on federally listed plants are anticipated in the adjacent area.

Federally Listed Wildlife Species

No suitable habitat for federally listed wildlife species is present within the SFVAMC Fort Miley Campus, and thus, no direct effects on federally listed wildlife species are anticipated to result from construction of the Alternative 1 long-term project. Similarly, no indirect impacts on federally listed wildlife species are anticipated in the adjacent area.

Other Species of Special Regional Concern

Vegetation removal for construction of the Alternative 1 long-term project could result in potentially adverse impacts on other species of special regional concern. Specifically, construction activities, including vegetation removal, have the potential to affect nesting birds protected under the MBTA, or to affect the western red bat. Vegetation removal conducted during the avian nesting season (approximately February through August) could adversely affect nesting birds and bats using the area. Vegetation removal conducted outside of the nesting season would be considered a short-term adverse impact on bird species and bats that use the vegetation on the existing SFVAMC Fort Miley Campus. However, implementing Mitigation Measure WH-1 would reduce this impact to a minor level by requiring wildlife surveys and avoidance of the breeding season.

Habitat Linkages and Corridors

The SFVAMC Fort Miley Campus does not contain habitat used by any species as a linkage or corridor. Because construction of the Alternative 1 long-term project would not result in changes to surrounding linkages and corridors, no impacts on habitat linkages or corridors would occur.

Operation*Vegetation/Habitat*

No effects on vegetation and habitat would result from operation of the Alternative 1 long-term project. Because the footprint of operations at SFVAMC Fort Miley Campus would remain generally the same, the condition of surrounding habitat is not anticipated to change or become degraded. Therefore, no direct or indirect impacts on vegetation and habitat would occur.

Federally Listed Plant Species

No federally listed plant species occur on the existing SFVAMC Fort Miley Campus; thus, no effects on federally listed plant species would result from operation of the Alternative 1 long-term project. Therefore, no direct or indirect impacts on federally listed plant species would occur.

Federally Listed Wildlife Species

No federally listed wildlife species occur on the existing SFVAMC Fort Miley Campus; thus, no effects on federally listed wildlife species would result from operation of the Alternative 1 long-term project. Therefore, no direct or indirect impacts on federally listed wildlife species would occur.

Other Species of Special Regional Concern

No species of regional concern occur on the existing SFVAMC Fort Miley Campus; thus, no effects on other species of regional concern would result from operation of the Alternative 1 long-term project. Therefore, no direct or indirect impacts on other species of special regional concern would occur.

Habitat Linkages and Corridors

Operation of the Alternative 1 long-term project would not result in changes to the overall quality or quantity of surrounding habitat used by species as linkages and corridors. Therefore, no direct or indirect impacts on these surrounding linkages and corridors would occur.

Alternative 2: SFVAMC Fort Miley Campus Buildout Alternative***Short-Term Projects***

Alternative 2 short-term projects at the existing SFVAMC Fort Miley Campus would be the same as Alternative 1 short-term projects, with one exception. Specifically, retrofitting of the existing Buildings 1, 6, and 8 would not occur as part of Alternative 2 short-term projects (Table 2-3 and Figure 2-3), but would instead be accomplished in the long term. Alternative 2 short-term projects include construction of a total of 485,445 gsf, which is 115,547 gsf less than for short-term projects under Alternative 1. Any vegetation removal conducted outside of the nesting season would be considered a short-term adverse impact on bird species and bats that use the vegetation on the existing SFVAMC Fort Miley Campus. However, implementing Mitigation Measure WH-1 would reduce any potential impact by requiring wildlife surveys and avoidance of the breeding season. Therefore,

impacts of Alternative 2 short-term projects would be similar to or less than those of Alternative 1 short-term projects. Wildlife and habitat impacts would range in significance from no impact to minor with mitigation.

Construction

Vegetation/Habitat

During construction of Alternative 2 short-term projects, approximately 65 of the estimated 232 trees on-site (largely Monterey pine, Monterey cypress, purple leaf plum, and plume albizia individuals) would be removed because of their potential for tree-fall and limb breakage hazards identified in previous tree surveys. In addition, approximately five trees would be removed along the eastern edge of the SFVAMC Fort Miley Campus to accommodate construction of Buildings 22 and 24. Trees would be addressed in the same manner under Alternative 2 long-term projects as described for Alternative 1 short-term projects. Some removed trees would be replaced with tree species more adapted to the windy conditions at the Campus. Trees would be planted along internal circulation roads, in surface parking lots, and near the two Campus entrances.

For the purposes of this analysis, it is assumed that a significant portion of the understory would be removed as part of Alternative 2 short-term projects. Removal of landscape species such as Monterey pine and Monterey cypress and the understory would not constitute an adverse impact on vegetation and habitats because these species are not native to the area. This direct impact would be minor. See the analysis under “Other Species of Special Regional Concern” below for a discussion of the effects of vegetation removal on migratory bird and bat species. Activities for Alternative 2 short-term projects would comply with VA Specification Section 015719, “Temporary Environmental Controls” (see Section 3.8, “Hydrology and Water Quality”) and with the San Francisco Public Works Code, Construction General Permit; therefore, no indirect effects on off-site vegetation and habitat would result from an increase in urban runoff. The existing landscaping would be replaced with similar vegetation. Because the existing and proposed landscaped vegetation on the Campus is not invasive, no exotic species are expected to invade the neighboring GGNRA lands. Therefore, no direct or indirect impacts on vegetation and habitat would result from construction of Alternative 2 short-term projects.

Federally Listed Plant Species

All of the plant species listed in Table 3.15-1 have low to no potential of occurrence on the SFVAMC Fort Miley Campus. In addition, recent SFVAMC EAs have stated that no federally listed plant species were observed on the existing Campus. Furthermore, no federally listed species were observed during the 2008 or 2012 field surveys. As a result, no direct construction-related impacts on federally listed plants are anticipated to result from construction of Alternative 2 short-term projects. In addition, no indirect effects on federally listed plants in the adjacent area are anticipated.

Federally Listed Wildlife Species

No suitable habitat for federally listed wildlife is present on the SFVAMC Fort Miley Campus. Thus, no direct construction-related impacts on federally listed wildlife species are anticipated to result from construction of Alternative 2 short-term projects. In addition, no indirect effects on federally listed wildlife are anticipated in the adjacent area.

Other Species of Special Regional Concern

Vegetation removal during construction of Alternative 2 short-term projects could result in potentially adverse effects on other species of special regional concern. Specifically, construction activities such as tree removal have the potential to affect nesting birds protected under the MBTA, or to affect the western red bat. Vegetation removal conducted during the avian nesting season (approximately February through August) could adversely affect nesting birds and bats using the area. Vegetation removal conducted outside of the nesting season would be considered a short-term adverse impact on bird species and bats that use the vegetation on the existing SFVAMC Fort Miley Campus. However, implementing Mitigation Measure WH-1 would reduce any potential impact by requiring wildlife surveys and avoidance of the breeding season.

Alternative 2 short-term projects would involve construction of 16 projects over approximately 6 years. Therefore, it may be necessary to implement the aforementioned measures repeatedly during this time frame. Implementing Mitigation Measure WH-1 would reduce this impact to a minor level.

Habitat Linkages and Corridors

The SFVAMC Fort Miley Campus does not contain habitat used by any species as a linkage or corridor, and construction of the Alternative 2 short-term projects would not result in changes to surrounding linkages and corridors. Therefore, no impacts on habitat linkages or corridors would occur.

Operation*Vegetation/Habitat*

No effects on vegetation and habitat would result from operation of Alternative 2 short-term projects. Because the footprint of operations at SFVAMC Fort Miley Campus would remain generally the same, the condition of surrounding habitat is not anticipated to change or become degraded. Therefore, no direct or indirect impacts on vegetation and habitat would occur.

Federally Listed Plant Species

No federally listed plant species occur on the existing SFVAMC Fort Miley Campus; thus, no effects on federally listed plant species would result from operation of Alternative 2 short-term projects. Therefore, no direct or indirect impacts on federally listed plant species would occur.

Federally Listed Wildlife Species

No federally listed wildlife species occur on the existing SFVAMC Fort Miley Campus; thus, no effects on federally listed wildlife species would result from operation of Alternative 2 short-term projects. Therefore, no direct or indirect impacts on federally listed wildlife species would occur.

Other Species of Special Regional Concern

No species of regional concern occur on the existing SFVAMC Fort Miley Campus; thus, no effects on other species of regional concern would result from operation of Alternative 2 short-term projects. Therefore, no direct or indirect impacts on other species of special regional concern would occur.

Habitat Linkages and Corridors

Operation of Alternative 2 short-term projects would not result in changes to the overall quality or quantity of surrounding habitat use by species as linkages and corridors. Therefore, no direct or indirect impacts on these surrounding linkages and corridors would occur.

Long-Term Projects

Alternative 2 long-term projects at the existing SFVAMC Fort Miley Campus would be the same as the Alternative 1 long-term project, with one exception. Specifically, three additional existing buildings—Buildings 1, 6, and 8—would be retrofitted as part of Alternative 2 long-term projects (Table 2-4 and Figure 2-4). Alternative 2 long-term projects include construction of a total of 285,487 gsf, which is 115,487 gsf more than under the Alternative 1 long-term project, because Alternative 2 includes construction of Building 213 along with the seismic retrofit of Buildings 1, 6, and 8. Therefore, construction impacts of Alternative 2 long-term projects would be similar to, although slightly greater than, those of the Alternative 1 long-term project. Wildlife and habitat impacts would be minor. Alternative 2 long-term projects would involve construction of approximately 170,000 net new gsf on 0.25 acre of previously disturbed area within the existing SFVAMC Fort Miley Campus over an estimated total duration of approximately 5.5 years.

Vegetation/Habitat

All construction staging for Alternative 2 long-term projects would occur within the SFVAMC Fort Miley Campus itself, in previously disturbed areas, and would result in limited effects on natural vegetation or wildlife habitat. In addition, tree removal would be conducted primarily during implementation of the short-term projects for Alternative 2, thus reducing the potential effects of Alternative 2 long-term projects on vegetation. Some vegetation removal may be necessary, but the vegetation that would be removed is primarily ornamental and unlikely to support local wildlife. Therefore, no direct or indirect impacts related to vegetation and habitat would result from construction of Alternative 2 long-term projects.

Federally Listed Plant Species

All of the plant species listed in Table 3.15-1 have low to no potential for occurrence on the SFVAMC Fort Miley Campus. In addition, recent SFVAMC EAs have stated that federally listed plant species were not observed on the existing Campus. Furthermore, no federally listed species were observed during 2008 or 2012 field surveys. As a result, no direct impacts on federally listed plants are anticipated to result from construction of Alternative 2 long-term projects. Similarly, no indirect impacts on federally listed plants are anticipated in the adjacent area.

Federally Listed Wildlife Species

No suitable habitat for federally listed wildlife species is present on the SFVAMC Fort Miley Campus, and thus, no direct effects on federally listed wildlife species are anticipated to result from construction of Alternative 2 long-term projects. Similarly, no indirect impacts on federally listed wildlife species are anticipated in the adjacent area.

Other Species of Special Regional Concern

Vegetation removal for construction of Alternative 2 long-term projects could result in potentially adverse impacts on other species of special regional concern. Specifically, construction activities, including vegetation removal, have the potential to affect nesting birds protected under the MBTA, or to affect the western red bat. Vegetation removal conducted during the avian nesting season (approximately February through August) could adversely affect nesting birds and bats using the area. Vegetation removal conducted outside of the nesting season would be considered a short-term adverse impact on bird species and bats that use the vegetation on the existing SFVAMC Fort Miley Campus. However, implementing Mitigation Measure WH-1 would reduce this impact to a minor level by requiring wildlife surveys and avoidance of the breeding season.

Habitat Linkages and Corridors

The SFVAMC Fort Miley Campus does not contain habitat used by any species as a linkage or corridor. Because construction of Alternative 2 long-term projects would not result in changes to surrounding linkages and corridors, no impacts on habitat linkages or corridors would occur.

Operation*Vegetation/Habitat*

No effects on vegetation and habitat would result from operation of Alternative 2 long-term projects. Because the footprint of operations at the SFVAMC Fort Miley Campus would remain generally the same, the condition of surrounding habitat is not anticipated to change or become degraded. Therefore, no direct or indirect impacts on vegetation and habitat would occur.

Federally Listed Plant Species

No federally listed plant species occur on the existing SFVAMC Fort Miley Campus; thus, no effects on federally listed plant species would result from operation of Alternative 2 long-term projects. Therefore, no direct or indirect impacts on federally listed plant species would occur.

Federally Listed Wildlife Species

No federally listed wildlife species occur on the existing SFVAMC Fort Miley Campus; thus, no effects on federally listed wildlife species would result from operation of Alternative 2 long-term projects. Therefore, no direct or indirect impacts on federally listed wildlife species would occur.

Other Species of Special Regional Concern

No species of regional concern occur on the existing SFVAMC Fort Miley Campus; thus, no effects on other species of regional concern would result from operation of Alternative 2 long-term projects. Therefore, no direct or indirect impacts on other species of special regional concern would occur.

Habitat Linkages and Corridors

Operation of Alternative 2 long-term projects would not result in changes to the overall quality or quantity of surrounding habitat used by species as linkages and corridors. Therefore, no direct or indirect impacts on these surrounding linkages and corridors would occur.

Alternative 3: SFVAMC Fort Miley Campus Plus Mission Bay Campus Alternative***Short-Term Projects***

Alternative 3 short-term projects (during both construction and operation) would be the same as short-term projects for Alternative 1 (Table 2-1 and Figure 2-1); thus, all Alternative 3 short-term projects would be located at the SFVAMC Fort Miley Campus. The impacts of Alternative 3 short-term projects would be the same as the impacts of Alternative 1 short-term projects. These impacts would range in significance from no impact to minor with mitigation (Mitigation Measure WH-1).

Long-Term Projects

Alternative 3 long-term projects (during both construction and operation) located at the existing SFVAMC Fort Miley Campus would be the same as Alternative 1 long-term projects, except that the ambulatory care center would be located at the potential new SFVAMC Mission Bay Campus under Alternative 3 (Table 2-5 and Figure 2-5).

Construction

Alternative 3 long-term projects at the potential new SFVAMC Mission Bay Campus would involve construction of approximately 170,000 net new gsf on 0.98 acre of land somewhere in the Mission Bay area over a total duration of approximately 3 years and 6 months (from late 2025 to late 2027).

Vegetation/Habitat

Because of the area's long history of industrial use, the undeveloped portions of the Mission Bay area provide no natural vegetation or habitat. Therefore, construction of an approximately 170,000-gsf medical center campus in this area under Alternative 3 long-term projects is anticipated to have no impact on vegetation or habitat.

Federally Listed Plant Species

Because of the area's long history of industrial use, the undeveloped portions of the Mission Bay area contain limited vegetation and no federally listed plant species. Therefore, construction of an approximately 170,000-gsf

medical center campus in this area under Alternative 3 long-term projects is anticipated to have no impact on federally listed plant species.

Federally Listed Wildlife Species

Because of the area's long history of industrial use, the undeveloped portions of the Mission Bay area provide no habitat for federally listed wildlife species. Therefore, construction of an approximately 170,000-gsf medical center campus in this area under Alternative 3 long-term projects is anticipated to have no impact on federally listed wildlife species.

Other Species of Special Regional Concern

Because of the area's long history of industrial use, the undeveloped portions of the Mission Bay area provide no habitat for other species of special regional concern. Mature trees in the vicinity may provide nesting habitat for birds or bats. Therefore, construction of an approximately 170,000-gsf medical center campus in this area under Alternative 3 long-term projects could have a minor impact on other species of special regional concern, if present. Implementation of Mitigation Measure WH-1 would further reduce the likelihood or level of severity of any potential impact on species of special regional concern.

Habitat Linkages and Corridors

The Mission Bay area does not contain habitat used by species as a linkage or corridor, and construction of an approximately 170,000-gsf medical center campus in this area under Alternative 3 long-term projects would not result in changes to other surrounding linkages and corridors. Therefore, no impacts on habitat linkages or corridors would occur.

Operation

Vegetation/Habitat

The Mission Bay area is mostly developed or previously disturbed by current and past land use, and minimal habitat or natural vegetation is present. Therefore, no direct or indirect impacts on vegetation and habitat are anticipated to result from operation of Alternative 3 long-term projects.

Federally Listed Plant Species

No suitable habitat or known occurrences of federally listed plant species are present in the Mission Bay area. Therefore, no direct or indirect impacts on federally listed plant species would result from operation of Alternative 3 long-term projects.

Federally Listed Wildlife Species

No suitable habitat or known occurrences of federally listed wildlife species are present in the Mission Bay area. Therefore, no direct or indirect impacts on federally listed wildlife species would result from operation of Alternative 3 long-term projects.

Other Species of Special Regional Concern

No suitable habitat or known occurrences of species of regional concern are present in the Mission Bay area. Therefore, no direct or indirect impacts on other species of regional concern would result from operation of Alternative 3 long-term projects.

Habitat Linkages and Corridors

No suitable habitat linkages or corridors are present in the Mission Bay area. Therefore, no direct or indirect impacts on habitat linkages or corridors are anticipated result from operation of Alternative 3 long-term projects.

Alternative 4: No Action Alternative

Short-Term and Long-Term Projects

Construction

Under Alternative 4, there would be no new construction and no retrofitting of existing buildings. Therefore, no direct or indirect construction-related impacts on wildlife and habitat would occur.

Operation

Under Alternative 4, the LRDP would not be implemented. Therefore, no direct or indirect operational impacts on wildlife and habitat would occur.

3.15.4 References

- California Native Plant Society (CNPS). 2010. Inventory of Rare and Endangered Plants (online edition, v8-01a). Sacramento, CA. Available: <<http://www.rareplants.cnps.org/result.html?adv=t&quad=37122G4:1>>. Last updated December 2010. Accessed September 1, 2011.
- California Natural Diversity Database (CNDDDB). 2012a (January 3). California Department of Fish and Game Occurrence Report for San Francisco North Quadrangle—Federal Only. Sacramento: California Department of Fish and Game, Wildlife and Habitat Data Analysis Branch.
- . 2012b (January 4). California Department of Fish and Game Occurrence Report for Nine Quadrangles centered around San Francisco North Quadrangle. Sacramento: California Department of Fish and Game, Wildlife and Habitat Data Analysis Branch.
- San Francisco Planning Department (SF Planning). 2011 (August). *Draft Environmental Impact Report for the Significant Natural Resource Management Plan, Case No.: 2005.1912E*. San Francisco, CA. Figure 1, Natural Areas.
- U.S. Department of Veterans Affairs (VA). 2010a (February). *San Francisco Veterans Affairs Medical Center Seismic Upgrade of Buildings 9, 10, & 13 and Building 22 Construction Addendum to the Environmental Assessment*. Prepared by EDAW.

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- . 2010b (November). *San Francisco Veterans Affairs Medical Center North Slope Seismic/Geologic Stabilization Project No. 662-609 Finding of No Significant Impact*. Prepared by Winzler & Kelly.
- . 2010c (June). *San Francisco Veterans Affairs Medical Center Mental Health Patient Parking Addition Project No. 662-Csi-612 Final Environmental Assessment and Response to Comments*. Prepared by Winzler & Kelly.
- . 2011a (January). *San Francisco Veterans Affairs Medical Center Parking and Emergency Response Structure Project No. 662-611 Environmental Assessment*. Prepared by Winzler & Kelly.
- . 2011b (January). *San Francisco Veterans Affairs Medical Center Veterinary Medical Unit Facility Replacement and Expansion Project No. 662-608 Draft Environmental Assessment*. Prepared by HDR, Inc.
- . 2012. *San Francisco Veterans Affairs Medical Center Fort Miley Campus Long Range Development Plan 2012 Habitat Assessment*. Prepared by AECOM Technical Services, Inc.
- U.S. Fish and Wildlife Service (USFWS). 2011a (December). *Species List for San Francisco Veterans Affairs Medical Center Institutional Master Plan EIS*. Letter report to AECOM.
- . 2011b. 50 CFR Part 17, Volume 76, Number 174, Endangered and Threatened Wildlife and Plants; 12-Month Petition Finding and Proposed Listing of *Arctostaphylos franciscana* as Endangered.

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