

**DEPARTMENT OF THE INTERIOR****Fish and Wildlife Service****50 CFR Part 17**

[Docket No. FWS-R8-ES-2012-0067;  
4500030114]

RIN 1018-AY63

**Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for *Arctostaphylos franciscana* (Franciscan Manzanita)**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service, designate critical habitat for *Arctostaphylos franciscana* (Franciscan manzanita) under the Endangered Species Act. In total, approximately 230.2 acres (93.1 hectares) in San Francisco County, California, fall within the boundaries of the final critical habitat designation. The effect of this regulation is to designate critical habitat for *A. franciscana* under the Endangered Species Act.

**DATES:** This rule is effective on January 21, 2014.

**ADDRESSES:** This final rule is available on the Internet at <http://www.regulations.gov>. Comments and materials received, as well as supporting documentation used in preparing this final rule, are available for public inspection, by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, 2800 Cottage Way, W-2605, Sacramento, CA 95825; telephone 916-414-6600; facsimile 916-414-6612.

The coordinates or plot points, or both, from which the maps are generated are included in the record for this critical habitat designation and are available at <http://www.regulations.gov> at Docket No. FWS-R8-ES-2012-0067, and at the Sacramento Fish and Wildlife Office at <http://www.fws.gov/Sacramento> (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we developed for this critical habitat designation will also be available at the Fish and Wildlife Service Web site and field office set out above, and may also be included in the preamble or at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Karen Leyse, Listing Coordinator, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, 2800 Cottage Way, W-2605, Sacramento, CA 95825;

telephone 916-414-6600; facsimile 916-414-6612. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

**SUPPLEMENTARY INFORMATION:****Executive Summary**

*Why we need to publish a rule.* This is a final rule to designate critical habitat for *Arctostaphylos franciscana*. Under the Endangered Species Act (Act), any species that is determined to be an endangered or threatened species requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule.

We listed *Arctostaphylos franciscana* as an endangered species on September 5, 2012 (77 FR 54434). On the same date we also proposed critical habitat for the species (77 FR 54517). We subsequently received new information on additional areas that contain the physical and biological features needed by the species, and we revised the proposed critical habitat on June 28, 2013 (78 FR 38897).

Section 4(b)(2) of the Act states that the Secretary shall designate critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary can exclude an area from critical habitat if he determines the benefits of exclusion outweigh the benefits of designation, unless the exclusion will result in the extinction of the species. The critical habitat areas we are designating in this rule constitute our current best assessment of the areas that meet the definition of critical habitat for *Arctostaphylos franciscana*. In total, we are designating approximately 230.2 acres (ac) (93.1 hectares (ha)), in 12 units in San Francisco County, California, as critical habitat for the species. A total of 13.9 ac (5.7 ha) (Unit 5) were occupied by the species at the time of listing; the remaining designation was not occupied at the time of listing, although an additional unit, Unit 2 (21.6 ac (8.7 ha)), is now considered occupied due to the recent reintroduction of *A. franciscana* to the unit.

*We have prepared an economic analysis of the designation of critical habitat.* In order to consider economic impacts, we have prepared an analysis of the economic impacts of the critical habitat designations and related factors. We announced the availability of the draft economic analysis (DEA) in the

**Federal Register** on June 28, 2013 (78 FR 38897), allowing the public to provide comments on our analysis. We have reviewed and incorporated the comments into this rule as necessary and have completed the final economic analysis (FEA) concurrently with this final determination.

*Peer review and public comment.* We sought comments from independent specialists to ensure that our designation is based on scientifically sound data and analyses. We obtained peer reviews from five knowledgeable individuals with scientific expertise to review our technical assumptions and analysis, and to determine whether or not we had used the best available information. We received responses from all five of the peer reviewers. These peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve this final rule. Information we received from peer review is incorporated in this final designation. We also considered all comments and information we received from the public during the comment period.

**Previous Federal Actions**

On September 5, 2012, we published in the **Federal Register** the final rule to list the species as endangered under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act) (77 FR 54434). On the same date, we also published the proposed rule to designate critical habitat for *Arctostaphylos franciscana* (77 FR 54517; September 5, 2012). On June 28, 2013, we published a document in the **Federal Register** making available the DEA and reopening the comment period on the proposed critical habitat (78 FR 38897). In addition, we corrected the acreage calculations for our September 5, 2012, proposal due to a mapping error, and increased the proposed designation of critical habitat by approximately 73 ac (30 ha).

**Background**

It is our intent to discuss below only those topics directly relevant to designating final critical habitat for *Arctostaphylos franciscana* in this rule. For additional background information, please see the September 8, 2011, combined 12-month finding and proposed listing rule (76 FR 55623), the September 5, 2012, final listing rule for the species (77 FR 54434), and the September 5, 2012, proposed rule to designate of critical habitat for *A. franciscana* (77 FR 54517), available at <http://ecos.fws.gov>.

## Summary of Comments and Recommendations

We requested written comments from the public on the proposed designation of critical habitat for *Arctostaphylos franciscana* during two comment periods. The first comment period began with the publication of the proposed rule on September 5, 2012 (77 FR 54517), and closed on November 5, 2012. We also requested comments on our revisions to the proposed critical habitat designation and associated draft economic analysis during a comment period that opened June 28, 2013, and closed on July 29, 2013 (78 FR 38897). We did not receive any requests for a public hearing. We also contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed rule and draft economic analysis during these comment periods.

During the first comment period, we received 425 comment letters directly addressing the proposed critical habitat designation. During the second comment period, we received 4,499 comment letters, of which 4,450 were form letters, addressing the proposed critical habitat designation or the draft economic analysis. All substantive information provided during the comment periods has either been incorporated directly into this final determination or is addressed below. Comments we received are addressed in the following summary and incorporated into the final rule as appropriate.

### Peer Review

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from five knowledgeable individuals with scientific expertise that included familiarity with *Arctostaphylos franciscana*, its habitat, and biological needs; the geographic region in which the species occurs; and principles of conservation biology. We received responses from all of the peer reviewers.

We reviewed all comments we received from the peer reviewers for substantive issues and new information regarding critical habitat for *Arctostaphylos franciscana*. The peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve the final critical habitat rule. Peer reviewer comments are addressed in the following summary and incorporated into the final rule as appropriate.

### Peer Reviewer Comments

(1) *Comment:* All peer reviewers provided comments on conservation measures, recommendations for the recovery plan, information on threats to the species, or research needs for *Arctostaphylos franciscana*.

*Our Response:* We appreciate the comments we received on conservation measures, recommendations for the recovery plan, threats to *Arctostaphylos franciscana*, and research needs for *A. franciscana*. These comments will be considered fully in the development of our recovery plan.

(2) *Comment:* One peer reviewer stated that some critical habitat units may be or may become unsuitable for *Arctostaphylos franciscana* because of soilborne pathogens or other reasons over time and that, as a result, it is important to designate as many independent units as feasible to increase the odds that at least some of these would remain free of these pathogens into the near future. The same peer reviewer stated that by identifying the maximum number of critical habitat units, the odds would increase of locating sites where the disease potential would be manageable even if pathogenic *Phytophthora* species were introduced.

*Our Response:* We selected areas of sufficient size and configuration to sustain natural ecosystem components, functions, and processes, while designating multiple units to represent a variety of suitable habitat while also providing for redundancy across the species' historical range.

(3) *Comment:* One peer reviewer suggested that, if critical habitat is designated, the Golden Gate National Recreation Area (GGNRA), the Presidio Trust, the San Francisco Natural Areas Program, and possibly others could develop a joint *Arctostaphylos franciscana* ecosystem management program to coordinate agency efforts.

*Our Response:* Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures. However, we expect to work

collaboratively with others, including the agencies mentioned by the commenter, in developing a recovery plan for the species, which could consider collaboration on a joint *Arctostaphylos franciscana* ecosystem management program.

(4) *Comment:* One peer reviewer noted that the threat from nonnative, root-rotting *Phytophthora* species is much greater than that posed by the introduction of nonnative plants or nutrient deposition. This reviewer suggested language be incorporated into the *Special Management Considerations or Protections* section of the rule. The peer reviewer stated that in the section, *Application of "Adverse Modification" Standard*, we also failed to explicitly indicate how various actions may result in the introduction of pathogenic *Phytophthora* species.

*Our Response:* This information has been incorporated into this final rule to the extent possible. Please see the *Special Management Considerations or Protections* and the *Application of "Adverse Modification" Standard* sections for the revised language.

(5) *Comment:* One peer reviewer provided information about Edgewood County Park, which is located approximately 23 miles (mi) (36 kilometers (km)) south of San Francisco, in San Mateo County, and suggested that the serpentine chaparral at this park be considered as a potential critical habitat site that occurs beyond the known historic distribution of *Arctostaphylos franciscana*. The peer reviewer suggested that including an experimental population in a place such as Edgewood County Park would provide the opportunity to see if situating *A. franciscana* in pre-existing chaparral might help to facilitate the Franciscan manzanita's establishment and long-term survival.

*Our Response:* We appreciate the suggestions; however, the Act allows for areas that were not occupied by the species at the time of listing to be designated as critical habitat only if they are considered essential to the conservation of the species. During our development of the proposed rule and this final rule, we did consider including areas outside the known historic range of the species as critical habitat. However, after considering the benefits of including these areas or limiting the designation to the historically known range, we determined that it was most appropriate not to include areas outside the known historical range of the species. This is reflected in our criteria and methods for determining the areas essential to and for the conservation of the species (see

*Criteria Used To Identify Critical Habitat* section). The introduction of the species outside its historically known range may cause additional concerns such as hybridization with other rare manzanitas, or exposing the species to other known and unknown threats. To our knowledge, *Arctostaphylos franciscana* has never occurred in San Mateo County. We checked information in our files that identified two other *Arctostaphylos* species as occurring at Edgewood Park. Introducing *A. franciscana* to the area may lead to hybridization of all three species in the area. We also considered the potential threat posed by nitrogen deposition at the park (Weiss 1999, pp. 1477, 1484). Additionally, there would not be connectivity between a unit at Edgewood Park and the units in San Francisco County. As a result, we have determined that areas such as Edgewood County Park, that are outside the species' historically known range, are not essential for the conservation of the species.

(6) *Comment*: A peer reviewer commented that research into microclimates available at additional suggested sites, such as Starr King Open Space, would be needed to seriously consider the sites for designation and to assess the potential impacts due to recreational use.

*Our Response*: Although we agree that it would be helpful to have information about the microclimates available at the suggested sites, we have not received any such information during the public comment period and we are not aware that any exist. We will consider future research needs in the development of the recovery plan for *Arctostaphylos franciscana*.

(7) *Comment*: One peer reviewer suggested that we include a fifth primary constituent element (PCE) "specific to self-sustaining populations" to highlight the importance of botanical gardens to the long-term recovery of *Arctostaphylos franciscana*, suggesting that, in effect, botanical gardens that host different individual genotypes that will contribute to restoring genetic diversity in new populations of *A. franciscana* are themselves "critical habitat" for the future recovery of this species. The reviewer suggested that if the botanical garden specimens of *A. franciscana* are recognized as a PCE, more work could be done to determine the provenance of these individuals and to begin propagating them for future establishment of *A. franciscana* individuals.

*Our Response*: We appreciate the reviewer's suggestion, but refer to agency guidelines for identifying PCEs,

which are listed in the *Criteria Used To Identify Critical Habitat* section below. As such, PCEs are elements of physical and biological features of the habitat, rather than specific areas of habitat, that are essential to the conservation of the species. The importance of botanical garden specimens in recovering *Arctostaphylos franciscana* will be addressed in the recovery plan.

The designation of botanical gardens as critical habitat would not afford additional funds for research as critical habitat applies only to Federal actions or actions that are permitted or funded by a Federal agency. In our listing of *Arctostaphylos franciscana*, we state that the plants in botanical gardens collected from historical sites and determined to be the listed entity are afforded protection under the Act (77 FR 54434; September 5, 2012). As a result, we have already identified the botanical garden plants and the places they occur as important for conservation.

(8) *Comment*: One peer reviewer provided detailed information on the threat posed by soilborne *Phytophthora* species.

*Our Response*: In designating critical habitat, we rely on information on threats evaluated when we listed the species, but we do not include an explicit discussion of threats. The information provided will be valuable when we prepare our recovery plan.

#### Comments From States

Section 4(i) of the Act states that the Secretary shall submit to the State agency a written justification for her failure to adopt regulations consistent with the agency's comments or petition. We received no comments from the State regarding the proposal to designate critical habitat for *Arctostaphylos franciscana*.

#### Federal Agencies

(9) *Comment*: The Presidio Trust requested that we revise the boundary of Unit 4B due to the lack of suitable soils for *Arctostaphylos franciscana* in a portion of the proposed unit.

*Our Response*: Based on information provided by the Presidio Trust and investigated during a site visit on March 15, 2013, we agree with the recommended change to remove an area of deep fill soils from the unit, and we have modified the critical habitat designation for Unit 4B.

(10) *Comment*: The Presidio Trust and the GGNRA requested exclusions to Units 3 and 5 (subunits 3A, 3B, and 5A) under section 4(b)(2) of the Act, due to their concerns that designating these subunits as critical habitat would impair

the options for managing habitat for other federally listed species (*Hesperolinon congestum* (Marin dwarf flax), *Clarkia franciscana* (Presidio clarkia), or *Arctostaphylos hookeri* var. *ravenii* (Presidio manzanita)).

*Our Response*: We have not excluded these units from critical habitat. The Act allows the Secretary of the Interior to exclude areas when the benefits of exclusion outweigh the benefits of inclusion, unless the Secretary determines that such exclusion will result in the extinction of the species (16 U.S.C. 1533(b)(2)). The commenters are requesting exclusion under this provision, suggesting that designating these units as critical habitat will impair their ability to manage the habitats for other federally listed species, and that therefore there would be a benefit to be gained from exclusion, i.e., eliminating the impairment to their management options, which would outweigh the benefits of inclusion. However, the designation of critical habitat will not have any negative effect on their options for managing the sites for other species. The designation of critical habitat simply provides a mechanism for providing for a species' recovery, whereby Federal agencies must review their actions to ensure they will not destroy or adversely modify those areas determined essential for the conservation of the species. It is extremely unlikely that managing habitat for the benefit of other federally listed plant species would result in the destruction or adverse modification of critical habitat for *Arctostaphylos franciscana*. Therefore, the designation of these units will not impair the commenter's ability to manage habitat for other federally listed plant species, and, subsequently, there is no benefit to be gained by excluding the units. Please note that *Arctostaphylos hookeri* var. *ravenii* (Presidio manzanita) has recently undergone a taxonomic revision to *Arctostaphylos montana* ssp. *ravenii* (Raven's manzanita). While it is still listed as *Arctostaphylos hookeri* var. *ravenii* (Presidio manzanita) in the List of Endangered and Threatened Plants at 50 CFR 17.12, in this final rule, we use its current scientific name.

(11) *Comment*: The National Park Service requested that Units 1 and 2 be modified to remove portions of these units due to pending soil remediation activities involved with two Army-era landfills and areas identified as possibly containing lead contamination.

*Our Response*: We have reviewed the request. We made minor adjustments to remove gun batteries, but we have not modified Unit 1 or 2 to remove portions of these units that are subject to soil

remediation. We expect that the soil remediation activities involved with the two Army-era landfills will be completed prior to our publishing this final rule. Additionally, we expect that the habitat in these units will be more suitable as habitat for the species as a result of the soil remediation.

(12) *Comment:* The National Park Service suggested that we refine the proposed critical habitat units by removing areas where the soil depth significantly exceeds 39 to 43 centimeters (cm) (15 to 17 inches (in)).

*Our Response:* We have not refined the critical habitat units by removing areas where the soil depth significantly exceeds 39 to 43 cm (15 to 17 in). To our knowledge this refined information does not exist for the critical habitat units. We looked at soil survey information available from the Soil Survey Geographic Database (SSURGO) (U.S. Department of Agriculture 2013), and the scale at which it is done does not provide information that we could use to refine the critical habitat units. Additionally, we contacted the National Park Service staff at the GGNRA and they stated that they also did not have similarly refined soil survey information for the area.

(13) *Comment:* The Presidio Trust indicated that reestablishing additional *Arctostaphylos franciscana*, or other serpentine chaparral species such as *A. montanum* ssp. *ravenii* manzanita, would be more appropriate in the coastal areas where these types of species are typically found.

*Our Response:* These two species were not typically found just in coastal areas, but also occurred inland. Areas which historically most likely supported both *Arctostaphylos franciscana* and *A. montanum* ssp. *ravenii* included: (1) The former Laurel Hill Cemetery; (2) the former Masonic Cemetery; (3) Mount Davidson; and (4) the Presidio. In addition, there is a record of "*Arctostaphylos pumila*" (Behr 1892; a misnomer for either *A. franciscana* or *A. montanum* ssp. *ravenii*, or perhaps both) at the former Protestant Orphan Asylum (Laguna at Haight Street), long urbanized in the late 1800s. The localities at the former Laurel Hill Cemetery, the former Masonic Cemetery, and Mount Davidson are inland, but subject to influence from summer fog. We have designated multiple locations to maximize the potential that suitable sites for re-introduction will be available, given the limited habitat available on the San Francisco peninsula.

#### *San Francisco Recreation and Park Department Comments*

(14) *Comment:* The San Francisco Recreation and Park Department (SFRPD) expressed concern with the designation of critical habitat in areas where the management recommendations in the 2006 Significant Natural Resource Areas Management Plan (SNRAMP) do not align with the rare plant conservation and restoration. The SNRAMP divides natural areas into one of three management areas that reflect their relative conservation value for plants and wildlife. Management areas 1 and 2 (MA-1 and MA-2) offer the highest conservation value because they contain the greatest biological diversity, the most intact native plant communities, sensitive plant and animal species, and/or high value wildlife habitat, while management area 3 (MA-3) areas contain predominantly nonnative vegetation and do not support sensitive species. The SFRPD provided detailed comments and requested that the critical habitat designation contain only MA-1 and MA-2 areas. The SFRPD has requested that the Secretary exercise her discretion to exclude some areas from the final designation of critical habitat under section 4(b)(2) of the Act.

*Our Response:* We appreciate the thorough and well-considered comments from the SFRPD. However, although we have removed some of the requested areas because they do not contain the PCEs or because they are not essential for conservation of the manzanita, we have not recommended that the Secretary exercise her discretion to exclude the requested areas from the final designation. We are required by section 4(b)(2) of the Act to consider the economic and other relevant impacts of critical habitat designation. As noted under *Federal Agencies*, above, the Secretary may account for those impacts by excluding any area for which the benefits of exclusion outweigh the benefits of designation, as long as this will not result in extinction of the species. The SFRPD comments and numerous additional comments indicate concern that critical habitat designation will negatively affect the SFRPD's ability to manage the areas as prescribed in the SNRAMP. We disagree. Critical habitat designation in these areas will not have any negative effect on management of the three management-area types, as described in the SNRAMP. We consider it extremely unlikely that management under the SNRAMP would result in the destruction or modification of critical habitat for *Arctostaphylos franciscana*.

Please see *Modifications to Critical Habitat Unit Information and Boundaries* for additional information on changes to Units 6 through 13.

(15) *Comment:* The San Francisco Recreation and Park Department (SFRPD) is concerned that the designation of critical habitat does not align with the existing high-intensity recreational activities in some areas, especially designated off-leash dog areas. In their comment, they noted, "While portions of the SFRPD natural areas support significant populations of sensitive plant and animal species, all SFRPD parkland is subject to intensive public use. Typical recreation activities in these natural areas include hiking, picnicking, nature viewing, walking, jogging, dog walking (both on-and off-leash) and sometimes biking." In order to identify lands that may successfully support the *Arctostaphylos franciscana*, the SFRPD requested that these more active areas, referring especially to the designated off-leash dog areas, be removed from consideration as critical habitat.

*Our Response:* We reviewed the request, and we removed the existing off-leash dog play area from Corona Heights (Unit 6) and eliminated Bernal Heights, an off-leash dog play area, from critical habitat. The existing off-leash dog play area in Corona Heights is fenced off and modified with wood chips. We visited Bernal Heights on November 15, 2012. The habitat is degraded and is heavily used. Due to the degraded nature of these sites, we do not consider these areas to be essential to the conservation of *Arctostaphylos franciscana*, and we have removed them from the final designation.

(16) *Comment:* The SFRPD provided detailed information regarding areas that do not appear to contain the biological and geological features to support *Arctostaphylos franciscana*, and requested that we remove these areas from critical habitat.

*Our Response:* We appreciate the thorough comments regarding areas that do not appear to contain the biological and geological features to support *Arctostaphylos franciscana*. We have made many of the requested changes. We did not make changes to remove an area from the final critical habitat designation where the integrity of the critical habitat unit would be compromised or where the primary constituent elements still exist. Areas that do not contain the physical and biological features for the species, but are within critical habitat units, do not constitute critical habitat although they may still be included within the boundaries of the units. When

determining critical habitat boundaries within this final rule, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features for *Arctostaphylos franciscana*. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps for of this final rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat. Please see *Modifications to Critical Habitat Unit Information and Boundaries* for additional information on changes to Units 6 through 13.

#### Public Comments

The majority of the public comments we received were form letters regarding designating SFRPD lands as critical habitat for *Arctostaphylos franciscana*. During the two public comment periods, we received 4,801 form letters that did not provide substantial information, but expressed the opinion that the designation of critical habitat on SFRPD land was either appropriate or not appropriate.

(17) *Comment:* Many commenters think that there would be restrictions placed on SFRPD land due to the designation of critical habitat for *Arctostaphylos franciscana*. The commenters asked us not to designate any of the city parks as critical habitat and expressed concerns that designation of critical habitat in San Francisco city natural areas park lands would: (1) Mean that all activities must be approved by the Service, in essence giving the Federal Government control over large parts of the city park lands; (2) lead to restrictions on public access and public use of these areas thereby negatively affecting recreation and people's health in a densely populated city; and (3) mean that healthy trees will have to be cut down wherever *A. franciscana* is planted to let the sun reach the plants thereby affecting the esthetic appeal of the parks and impacting the wind resistance these trees currently provide.

*Our Response:* The designation of critical habitat is not expected to put restrictions on management of SFRPD

land and does not mean that activities in these areas (such as building a new trail) must be approved by the Service. Additionally, the designation of critical habitat only has any bearing on Federal actions, in that Federal agencies will need to consult with us to ensure their actions will not destroy or adversely modify critical habitat. The designation of critical habitat only affects actions that are either carried out, authorized, or funded by a Federal agency. Very few, if any, activities that take place on SFRPD land have Federal involvement (what we call a Federal nexus). Because critical habitat only applies to activities implemented by a Federal agency or that require Federal authorization or funding, we do not expect the operations of city park lands to change due to critical habitat designation. The DEA (RTI International 2013b) identified only one informal consultation that the SFRPD might need during the 20-year timeframe, should they acquire Federal funding to complete a trail maintenance project that might occur in McLaren Park (Units 12 and 13). With regard to other activities on nonfederal lands, the potential for Federal nexus is very low (RTI International 2013b, p. 3–1, 3–2, and 3–7).

The designation of critical habitat does not require the implementation of restoration, recovery, or enhancement measures. Additionally, designation of critical habitat does not establish a refuge, wilderness, reserve, preserve, or other conservation area.

We also note that several areas the public expressed concern over (McKinley Park and Starr King open space near Potrero Hill, Grandview Park, the rock outcropping on 14th Ave., and Golden Gate Heights Park) are not areas that we are designating as critical habitat.

(18) *Comment:* A couple commenters indicated that the taxonomy of *Arctostaphylos franciscana* (Franciscan manzanita) is ambiguous. Some commenters suggested that the individual manzanita plant that was discovered on Doyle Drive is possibly a hybrid. One commenter stated that the East Bay Regional Park District botanical garden in Tilden Park has planted one of the clones of the individual plant from Doyle Drive and that it is labeled as a hybrid of *A. uva-ursi*.

*Our Response:* The identification of the Doyle Drive manzanita as a wild representative of *Arctostaphylos franciscana* was confirmed by species experts (Vasey and Parker 2010, pp. 1, 5–7). The genetics and taxonomy of *A. franciscana* are addressed in the final listing rule (77 FR 54434; September 5,

2012) and are not the subject of this critical habitat rule.

(19) *Comment:* One commenter stated that *Arctostaphylos franciscana* has been sold by commercial nurseries for about 50 years and suggested that it is considered endangered due to an anomaly of the Act. Many other commenters stated that exact clones of *A. franciscana* relocated from Laurel Hill in the 1940s can be bought at Bay Area nurseries and asked why we would close access to SFRPD lands to plant something that can be bought in Berkeley.

*Our Response:* In our final listing rule (77 FR 54434; September 5, 2012), we addressed the uncertain genetic make-up of *Arctostaphylos franciscana* and heritage of nursery stock sold by commercial nurseries. As a result, we did not include these plants as part of the listed entity. We did include the transplanted plants with documented provenance as *A. franciscana* as part of the listed entity.

In response to the closure of areas, as noted above, critical habitat designation does not close areas or direct management changes or changes in activity. The purpose of the Act is to provide a means whereby the ecosystem upon which endangered species and threatened species depend may be conserved. Reliance on planting *Arctostaphylos franciscana* in botanical gardens or conserving the species on seed storage alone does not protect the species in its natural habitat. Critical habitat designations affect only Federal agency or federally funded or permitted actions. Critical habitat designations do not have bearing on activities by private landowners, or by local or State government agencies, if there is no Federal nexus.

(20) *Comment:* One commenter stated that additional land farther inland that meets the criteria for *Arctostaphylos franciscana* habitat should be designated, and suggested designating habitat north into Marin County and east into Contra Costa and Alameda Counties, in order to preserve the species in the long term due to climate change from sea level rise. Other commenters suggested locations at Marin Headlands and near Crystal Springs Reservoir as potential critical habitat sites. No specific areas were provided.

*Our Response:* Critical habitat can be revised should it become necessary to designate additional units due to sea level rise. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery

of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. See our response to Comment 5, above, for additional information on planting areas outside the species' historic range.

(21) *Comment:* One commenter suggested that we expand the critical habitat areas to include all the remaining serpentine outcrops in the City and County of San Francisco that contain the primary constituent elements. The commenter suggested that conditions are likely to be appropriate in areas such as Rocky Outcrop, Tank and Kite Hill, Edgehill Mountain, and McLaren Park. Another commenter suggested the U.S. Mint; McLaren Park; Bayview Hill; UCSF, Laurel Hill Campus; Buena Vista Park; Corona Heights Park; Starr King Open Space; and Hunters Point Serpentine Grassland as sites worthy of consideration for planting *Arctostaphylos franciscana* but provided no justification for the specified locations.

*Our Response:* As part of our criteria for determining which areas to designate as critical habitat, we reviewed whether a selection of areas were of sufficient size and appropriate configuration (spatial arrangement and amount of fragmentation) to sustain natural ecosystem components, functions, and processes such as full sun exposure, summer fog, natural fire and hydrologic regimes, and intact mycorrhizal or edaphic interactions. We also considered factors such as the protection of existing substrate continuity and structure, connectivity among groups of plants to facilitate gene flow among the sites through pollinator activity and seed dispersal, and sufficient adjacent suitable habitat for vegetative reproduction and population expansion. During our development of the proposed rule, we looked at all the prospective areas associated with serpentine, greenstone, or Franciscan formations within San Francisco City and County that met our criteria as potential critical habitat, including most of the areas mentioned by the commenter. We also conducted site visits to confirm suitability of sites that we had initially identified using satellite imagery. Based on this process, we identified the units that were included in the September 5, 2012, proposed critical habitat (77 FR 54517). Some of the originally identified sites were not selected as critical habitat due to their small size. We remain concerned that small sites will not sufficiently support the pollinator, fruit

dispersal, and mycorrhizal communities that are thought to be necessary for the successful establishment of the species.

Bayview Park and Corona Heights were included in our original proposed designation (77 FR 54517). We added two additional units at McLaren Park and additional subunits at Diamond Heights in our June 28, 2013, revised proposal (78 FR 38897).

(22) *Comment:* As evidence against designating critical habitat for *Arctostaphylos franciscana* outside of the Presidio, one commenter stated that: (1) The close relationship between *A. montanum* ssp. *ravenii* and *A. franciscana* and the failure to propagate *A. montanum* ssp. *ravenii* in the 30 plus years since it has been listed as an endangered species suggests that it is unlikely to be possible to establish a population of *A. franciscana* in the wild; (2) the horticultural requirements for propagating *A. franciscana* cannot be met in San Francisco's public parks because it requires fire to germinate seeds; and (3) the soil in the proposed critical habitat may have been damaged by heavy herbicide use and without testing, we cannot assume that the soil will support *A. franciscana* as the species is dependent on mycorrhizal fungi in the soil for its long-term survival and the use of certain herbicides is known to be toxic to microorganisms such as mycorrhizae.

*Our Response:* Section 4 of the Act and our regulations at 50 CFR 424.12 require that we designate critical habitat for any species listed as endangered or threatened. The ability to establish and manage a population of an endangered species is not one of the criteria in determining whether critical habitat should be designated. The circumstances and reasons why extensive propagation of *Arctostaphylos montanum* ssp. *ravenii* has not occurred are complex and unique to that species. The circumstances surrounding *A. franciscana* are quite different, and nursery stock have already been planted in the field.

(23) *Comment:* One commenter stated that the Service should designate all areas where individuals propagated from wild plants have been planted, including all plants derived from regional botanic gardens, because individuals in these botanic gardens have not been exempted from the listing rule (in contrast, individuals from private nurseries have been exempted from listing rule).

*Our Response:* In determining which areas we should designate as critical habitat, we included only those areas which contained the physical or biological features essential to the

conservation of the species or other specific areas otherwise essential for the conservation of the species. The designation of certain areas as critical habitat does not mean that areas outside the designation are not important to the species, and we may revise critical habitat if information requires us to do so in the future. The areas within the botanical gardens where the historic *Arctostaphylos franciscana* plants occur are not endemic habitats for the species and are heavily managed areas that do not meet our criteria for critical habitat. However, because the botanical garden plants are considered part of the listed entity, they still receive the protections under the Act for an endangered species. See our response to Comment 5, above, for additional concerns regarding designating areas outside the historic range of the species.

(24) *Comment:* Many commenters noted that Bernal Heights, Glen Canyon Park (labeled Diamond Heights), Mount Davidson, Corona Heights, and Bayview Hill have been identified by SFRPD as important bird habitat, and expressed concern that designation of these locations as manzanita critical habitat could be detrimental to wildlife that depend on these areas.

*Our Response:* The designation of an area as critical habitat does not require that the existing habitat in that area be changed, restored, or converted in any way. Critical habitat is a means whereby Federal agencies are alerted that a certain area is essential for a given species. In the event that there are future efforts to restore *Arctostaphylos franciscana* plants to any locations within these units, the plantings are not expected to have any effect on existing habitat other than to restore a native plant that was likely to have been present at some point in the past. One of the purposes of the Act is to provide for the conservation of the ecosystem on which a species depends. We consider this purpose to include conserving the native bird and other wildlife within these areas.

(25) *Comment:* Many commenters requested that popular recreation areas and forests be excluded from the critical habitat designation for the manzanita. They said that "the critical habitat designation for the restoration of the mission blue butterfly at Twin Peaks Park demonstrates how the critical habitat designation leads to the closure of the majority of hiking trails even without any significant impacts on the endangered species."

*Our Response:* We wish to clarify that there is no critical habitat designation for the mission blue butterfly (*Icaricia icariodes missionensis*), nor is critical

habitat designated for any federally listed species at Twin Peaks. Critical habitat for mission blue butterfly was proposed on February 8, 1977 (42 FR 7972), but the critical habitat designation was never finalized. However, reintroduction of the mission blue butterfly at Twin Peaks Natural Area in 2009 did result in re-routing trails away from mission blue butterfly habitat, and closing of some social trails (Wayne *et al.* 2009, pp. 35–36). A social trail is a path that is created over time by off-trail use.

(26) *Comment:* One commenter suggested that planting in multiple areas, without the restrictions of critical habitat, could be more conducive to *Arctostaphylos franciscana* recovery than defining 5 or 10 limited locales as “critical habitat” on the basis of limited data and limited size in San Francisco alone. Areas suggested for planting included San Francisco, Marin, and the Peninsula including Milagro and Sweeney ridge areas, above the Devil’s slide, and as far south as San Luis Obispo County.

*Our Response:* Section 4 of the Act and our regulations at 50 CFR 424.12 require that we designate critical habitat for any species listed as endangered or threatened, to the extent that designation is prudent and determinable. We believe we have made our determination of critical habitat by using the best scientific and commercial information available and do not think it is appropriate to plant outside the historic range of the species (see our responses to Comments 5 and 17, above). However, we will consider this information when we develop a recovery plan for *Arctostaphylos franciscana*.

(27) *Comment:* One commenter suggested that planting any species, including *Arctostaphylos franciscana*, should not impede or delay essential seismic retrofit work, specifically the Twin Peaks Reservoir, indicating that the reservoir, an essential part of San Francisco fire prevention resources in the event of an earthquake, was to be reconstructed starting in 2012 and is now delayed to 2013 or 2014.

*Our Response:* The Twin Peaks Reservoir is not within the designated critical habitat. Therefore, critical habitat designation for *Arctostaphylos franciscana* will not impede or delay essential seismic retrofit work on the Twin Peaks Reservoir.

(28) *Comment:* Many commenters pointed out that we called most of the critical habitat units unoccupied. The commenters stated that these areas contain many trails popular with hikers, bikers, and dog walkers and that

thousands of people walk both with and without dogs in these areas every day and that they are not “unoccupied.”

*Our Response:* We wish to clarify that when we used the term “unoccupied” that we were only referring to whether or not the critical habitat unit contains the listed species (*Arctostaphylos franciscana*) and not whether the areas are used by the public.

#### *Economic Analysis Comments*

(29) *Comment:* One commenter stated that the economic benefits of the critical habitat designation, such as those benefits from increased restoration jobs, increased value of lands in the critical habitat, and recreation opportunities associated with stewardship of a species from the brink of extinction, have not been sufficiently quantified in the economic analysis.

*Our Response:* Benefits are addressed qualitatively in the FEA. No management changes or restoration jobs are expected as a result of the designation of critical habitat; therefore no changes in jobs or land value are anticipated.

(30) *Comment:* One commenter stated that the draft economic analysis is not adequate for several reasons including the lack of costs attributed to restrictions on public use, failure to account for additional plantings, and the low consultation costs ascribed to the SFRPD. The commenter states that “any significant changes or work done in the areas, or use approval or restrictions, will require consultation, with much higher than disclosed costs.”

*Our Response:* The primary purpose of the economic analysis is to identify and value the incremental impacts of the critical habitat designation. Incremental impacts are the impacts attributable to the critical habitat designation and are separate from any impacts resulting from the listing the species or the actions taken to protect the species. Only activities that involve a Federal nexus (e.g., require a Federal permit or receive funding from the Federal government) require a consultation to determine whether the activity is likely to adversely affect the physical or biological features (i.e., features of the habitat that are important to the species). Based on information from the SFRPD and the Service, few consultations between the SFRPD and the Federal Government are anticipated because only projects with Federal funding, requiring a Federal permit, or having other Federal association will require a consultation. It is also anticipated that consultations will be informal, and only administrative costs will be incurred during the consultation

process because the SNRAMP already has management measures in place to conserve and protect the habitats within the parks.

Furthermore, no restrictions or restoration projects as a result of critical habitat designation are anticipated. Any costs associated with additional plantings of the species are attributable to the species’ listing and not the critical habitat designation.

(31) *Comment:* Many commenters did not agree with other comments stating that recreational opportunities will be significantly impacted by the designation and further stated that the designation may provide additional restoration jobs as well as create opportunities for local businesses.

*Our Response:* Based on information from the SFRPD and our consultation history, no management changes or restoration programs are anticipated to be implemented solely as a result of the critical habitat designation. Therefore, restoration jobs and business opportunities are not estimated in this analysis. Effects of critical habitat on recreation are discussed further in our response to Comment 15.

(32) *Comment:* One commenter opposes the restriction of use and access as well as the application of shrinking funds to restore *Arctostaphylos franciscana* in areas where it does not currently exist.

*Our Response:* The management activities outlined in the SNRAMP are consistent with prevention of adverse modification to the proposed designated critical habitat, and no management changes are expected due to designation of critical habitat. Therefore, restrictions of use and habitat restoration costs are not anticipated as a result of critical habitat designation. Any species reintroduction costs would be attributable to the listing of the species and not the critical habitat designation.

(33) *Comment:* The commenter states that the draft economic analysis is overly simplistic. The commenter believes that additional restrictions on use by residents and visitors due to the designation will in turn generate additional costs as a result of loss of wellbeing, opportunity costs by current users of the park, and public court costs arising from public use conflicts.

*Our Response:* No management changes, such as use restrictions, are expected due to designation of critical habitat; therefore no use restriction-related costs are expected.

(34) *Comment:* One commenter states that the draft economic analysis is incomplete because it does not account for the impacts to the public. The commenter believes physical and



mental health will be negatively impacted by the critical habitat designation.

**Our Response:** The primary purpose of the economic analysis is to identify and assign values for the incremental impacts of the critical habitat designation. Incremental impacts are the impacts attributable to the critical habitat designation and are separate from any impacts resulting from the listing the species or the actions taken to protect the species. Only activities that involve a Federal nexus (e.g., require a Federal permit or receive funding from the Federal Government) and that are likely to adversely modify the physical or biological features will be affected by the critical habitat designation. Furthermore, because no management changes or use restrictions are anticipated as a result of the critical habitat designation, impacts to the public recreation opportunities are not expected.

(35) **Comment:** One commenter does not agree with the estimates of the draft economic analysis or the assumption that many costs will be incurred regardless of whether critical habitat is designated. The commenter states that the designation of Bayhill Park (Unit 11) will likely require the removal of all 6,000 trees at the site because *Arctostaphylos franciscana* requires full sun. Because the habitat is unoccupied and tree removal is typically \$3,000 per tree, all of these costs would be considered incremental with the exception of the 505 trees that are currently identified for removal as part of the Natural Areas Program management plan. Additionally, the Recreation and Park Department may incur significant legal fees due to legal cases associated with the endangered species (e.g., they could be sued if the reintroduced endangered species do not survive on the grounds of insufficient care). The commenter states a similar case that recently cost the Recreation and Parks Department \$386,000 even though the suit was lost. The commenter also states that the cost estimate does not include maintenance and care for the reintroduced plants in State parks and only discusses the administrative and consultation costs associated with the critical habitat designation. Finally, the commenter states that even when there is a consultation, it would not provide for care or contribute to the progress of the plant.

**Our Response:** Management activities and restoration actions under the existing SNRAMP are consistent with the management of critical habitat to conserve *Arctostaphylos franciscana*

and its habitat and prevent adverse modification; therefore no additional incremental cost is expected. The designation of critical habitat for *A. franciscana* does not require the large-scale removal of trees.

Although no public court costs related to the health of the endangered species are anticipated, these costs would be attributable to the listing of the species and not to the designation of critical habitat. Costs associated with the maintenance and care of the species are also baseline costs, and would not be attributable to the designation of critical habitat.

#### Summary of Changes From Proposed Rule

In preparing our final designation of critical habitat for *Arctostaphylos franciscana*, we reviewed comments we received on the 2012 proposed designation, the 2013 revised proposed designation of critical habitat, and the 2013 DEA. In the June 28, 2013, revised proposal (78 FR 38897), we revised unit acreages to correct inaccuracies made due to use of an incorrect map projection, resulting in a revised acreage of 197 ac (80 ha) for the 11 units that we originally proposed on September 5, 2012 (77 FR 54517). In the same revised proposal, we also increased the proposed designation by approximately 73 ac (30 ha) to a total of approximately 270 ac (109 ha) in 13 critical habitat units located in the City and County of San Francisco, and made some modifications to the methods used to delineate the proposed units. We keep those revisions in this final designation. Additionally, this final designation reflects minor clarifications in the text of the 2013 revised proposal, as well as more substantive changes to the revised proposal, as follows:

#### Revision of Physical or Biological Features

In this final designation, we revised the heading of “Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring” to “Sites Exhibiting Necessary Physical or Biological Requirements” to better reflect and more appropriately characterize the components of summer fog, fungal mycorrhizae relationship, and pollinators.

#### Modifications to Critical Habitat Unit Information and Boundaries

We are making modifications to the critical habitat based on comments that we received from the Presidio Trust, the GGNRA, the SFRPD, and the public. We also based some of these changes on several site visits that we made. We

received comments from the Presidio Trust and GGNRA on Units 1 and 2, and subunits 3A, 3B, 4B, and 5A, and we made subsequent site visits to Units 2, 4, and A. Additionally, we received comments from the SFRPD on Units 6 through 13, and we made site visits to Units 12 and 13. We are modifying the following units and subunits: 1, 2, 4B, 5A, 6, 9A, 9B, 10, 11, 12A, 12B and 13, as follows:

(1) In Unit 1, which is not occupied by the species at the time of listing, we identified a road that does not provide any habitat for the species. We have removed this area from the unit because the roaded area does not provide habitat and is not considered essential for the conservation of the species, thereby decreasing the acreage of the unit by less than 0.1 ac (0.4 ha).

(2) In Unit 2, as a result of restoration activities for the species, 68 A. *franciscana* plants were reintroduced to this unit since the listing. This unit is currently occupied, although it was not occupied at the time of listing. Also, the acreage reported in the revised proposed critical habitat rule should have been 22.3 ac (9.0 ha) instead of 21.3 ac (8.7 ha). We had noticed this difference, but it was not identified in the revised proposed critical habitat. In Unit 2, we also identified historic military gun batteries (concrete emplacements) and a parking lot along the edge of the unit. We have removed these areas from the unit because they are not essential for the conservation of the species and would not support *Arctostaphylos franciscana*. do not and The acreage of the unit was thereby decreased by less than 1 ac (0.4 ha) from 22.3 ac to 21.6 ac (9.0 ha to 8.7 ha).

(3) In Unit 4 (unoccupied by the species at the time of listing), we identified an area of subunit 4B along the edge of a quarry wall and roadway that does not provide appropriate substrate conditions for *Arctostaphylos franciscana*. We have refined our designation within subunit 4B to remove this area because it does not provide habitat for the species and thus is not considered essential for the conservation of the species, thereby reducing the acreage of the subunit from 4.0 ac to 1.1 ac (1.6 ha to 0.4 ha).

(4) In Unit 5 (occupied by the species at the time of listing), we removed the area of historic forest in subunit 5A because the area does not provide the physical or biological features essential to the conservation of the species. As a result, we have refined our designation within subunit 5A and reduced it from 13.2 ac to 11.8 ac (5.4 ha to 4.8 ha), reducing the acreage of the subunit by approximately 1.4 ac (0.6 ha).



(5) In Unit 6 (unoccupied by the species at the time of listing), we removed the existing off-leash dog play area and part of the MA-3 areas because the off-leash dog play area is degraded and the MA-3 areas are wooded. We have determined that these areas of the unit are not essential for the conservation of the species because they do not provide the habitat conditions appropriate for the species, and have accordingly refined our designation within Unit 6 and reduced it from 6.1 ac to 5.2 ac (2.5 ha to 2.1 ha), reducing the acreage of the unit by 0.9 ac (0.4 ha).

(6) In subunit 9A (unoccupied by the species at the time of listing), we removed areas of a wet-meadow and an area with deep, loamy soil. Neither of these areas provide the appropriate habitat conditions for *Arctostaphylos franciscana* and we have determined that they are not essential for the conservation of the species. We have accordingly refined our designation within subunit 9A and reduced it from 21.3 ac to 19.1 ac (8.6 ha to 7.7 ha), reducing the acreage of the unit by 2.2 ac (0.9 ha).

(7) In Unit 9 (unoccupied by the species at the time of listing), we removed several areas having either wet-soil or fill material within subunit 9B because none of these areas provide the appropriate habitat conditions for *Arctostaphylos franciscana* and as a result, we have determined that they are not essential for the conservation of the species. We have refined our designation within subunit 9B and reduced it from 5.7 ac to 3.9 ac (2.3 ha to 1.6 ha), reducing the acreage of the subunit by 1.8 ac (0.7 ha).

(8) Unit 10 (Bernal Heights) (unoccupied by the species at the time of listing) was removed from the designation. On April 26, 2012, and November 15, 2012, we conducted site visits to review our proposed designation. During our review, we examined the habitat conditions at Unit 10 and observed that the area is highly degraded and heavily used by the public. After further consideration of the habitat conditions at the site and review of our criteria for selecting areas as critical habitat, we do not consider the areas at Bernal Heights to be essential for the conservation of the species, and we therefore do not include the proposed Unit 10 (14.9 ac (6.0 ha)) in this final designation of critical habitat.

(9) In Unit 11 (unoccupied by the species at the time of listing), we removed two MA-3 areas. One of the areas contained modified and degraded habitat. The other area contained substantial forest overstory. We have

determined that these areas are not essential for the conservation of *Arctostaphylos franciscana*. However, we have determined that other MA-3 areas within the unit are essential for the conservation of the species due to their importance to preserving the integrity of the unit. We have therefore refined our designation within Unit 11 and reduced it from 53.2 ac to 42.4 ac (21.5 ha to 17.2 ha), reducing the acreage of the unit by 10.8 ac (4.3 ha).

(10) In Unit 12 (unoccupied by the species at the time of listing), we refined our mapping boundaries of subunit 12A to remove a marginal area that we now do not consider essential for the conservation of the species because it would not support *Arctostaphylos franciscana*. The acreage of the subunit was reduced by less than 1 ac (0.4 ha) from 14.3 ac to 13.4 ac (5.8 ha to 5.4 ha). We also removed a wetland seep area, picnic area, and a MA-3 area in subunit 12B. These areas do not provide the appropriate habitat conditions for *A. franciscana* and are therefore not considered to be essential for the conservation of the species. We have refined our designation within subunit 12B and reduced it from 12.3 ac to 11.6 ac, thereby reducing the acreage of the subunit by 0.7 ac (0.3 ha).

(11) In Unit 13 (unoccupied by the species at the time of listing), we removed two MA-3 areas with dense vegetation that we have determined are not essential for the conservation of the species, because these areas would not provide the appropriate habitat conditions for *Arctostaphylos franciscana*. Accordingly, we have refined our designation within Unit 13 and reduced it from 29.7 ac to 25.7 ac (11.9 ha to 10.4 ha).

(12) In Units 8 and 11 the GIS mapping was adjusted to be coincident with parcel lines within the units. These parcel lines matched the appropriate habitat conditions for *Arctostaphylos franciscana* and the areas considered essential for the conservation of the species. As a result, there were small changes (0.1 ac (0.04 ha) or less) to the total area considered critical habitat for these two units.

### Critical Habitat

#### Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require

special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical or biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the

species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, other unpublished materials, or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. Climate change will be a particular challenge for biodiversity because the interaction of additional stressors associated with climate change and current stressors may push species beyond their ability to survive (Lovejoy 2005, pp. 325–326). The synergistic implications of climate change and habitat fragmentation are the most threatening facet of climate change for biodiversity (Hannah *et al.* 2005, p.4). Current climate change predictions for terrestrial areas in the Northern Hemisphere indicate warmer air temperatures, more intense precipitation events, and increased summer continental drying (Field *et al.* 1999, pp. 1–3; Hayhoe *et al.* 2004, p. 12422; Cayan *et al.* 2005, p. 6; Intergovernmental Panel on Climate Change (IPCC) 2007, p. 1181). Climate change may lead to increased frequency and duration of severe storms and droughts (McLaughlin *et al.* 2002, p. 6074; Cook *et al.* 2004, p. 1015; Golladay *et al.* 2004, p. 504).

We anticipate these changes could affect a number of native plants and their habitats, including *Arctostaphylos franciscana* occurrences and habitat. For example, if the amount and timing of precipitation changes or the average temperature increases in northern California, the following changes may affect the long-term viability of *A. franciscana* in its current habitat configuration:

- (1) Drier conditions or changes in summer fog may result in additional stress on the transplanted plant.
- (2) Drier conditions may also result in lower seed set, lower germination rate, and smaller population sizes.
- (3) A shift in the timing of annual rainfall may favor nonnative species that impact the quality of habitat for this species.
- (4) Warmer temperatures may affect the timing of pollinator life-cycles causing pollinators to become out-of-sync with timing of flowering *A. franciscana*.

(5) Drier conditions may result in increased fire frequency, making the ecosystems in which *A. franciscana* currently grows more vulnerable to the initial threat of burning, and to subsequent threats associated with erosion and nonnative or native plant invasion.

However, currently we are unable to specifically identify the ways that climate change may impact *Arctostaphylos franciscana*; therefore, we are unable to determine if any additional areas may be appropriate to include in this final critical habitat designation.

For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to insure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

#### *Physical or Biological Features*

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

(1) Space for individual and population growth and for normal behavior;

(2) Food, water, air, light, minerals, or other nutritional or physiological requirements;

(3) Cover or shelter;

(4) Sites for breeding, reproduction, or rearing (or development) of offspring; and

(5) Habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

We derive the specific physical or biological features essential for *Arctostaphylos franciscana* from studies of this species' habitat, ecology, and life history as described in the Critical Habitat section of the proposed rule to designate critical habitat published in the **Federal Register** on September 5, 2012 (77 FR 54517), and in the information presented below.

Additional information can be found in the final listing rule published in the **Federal Register** on September 5, 2012 (77 FR 54434); the 2003 Recovery Plan for Coastal Plants of the Northern San Francisco Peninsula (Service 2003); and the Raven's Manzanita Recovery Plan (Service 1984). We have determined that *Arctostaphylos franciscana* requires the following physical or biological features:

#### Space for Individual and Population Growth and for Normal Behavior

Historically, the 46-mi<sup>2</sup> (119-km<sup>2</sup>) tip of the San Francisco peninsula contained a diversity of habitat types including dunes, coastal scrub, maritime chaparral, grasslands, salt and fresh water marsh, oak woodlands, rocky outcrops, and serpentine habitats (Holland 1986, pp. 1–156; Sawyer and Keeler-Wolf 1997, p. 211; National Park Service 1999, pp. 18–26). The vegetation of the area is influenced by coastal wind, moisture, and temperature (Service 1984, pp. 11–16; Chasse *et al.* 2009, p. 4). The maritime chaparral and open grassland plant communities, of which *Arctostaphylos franciscana* is a part, may have been present historically to a greater extent (even before habitat loss through development), but the cumulative effects of periodic burning by native Americans, grazing during the mid-1800s to early 1900s, gathering of firewood during the U.S. military period, and fire suppression actions during the 1900s to the present may have converted many of the areas to nonnative grassland or depauperate coastal scrub (Sweeney 1956, pp. 143–

250; Schlocker 1974, pp. 6–7; Christensen and Muller 1975, pp. 29–55; Keeley and Keeley 1987, pp. 240–249; Greenlee and Langenheim 1990, pp. 239–253; Tyler 1996, pp. 2182–2195; Keeley 2005, pp. 285–286; Chasse 2010, p. 2).

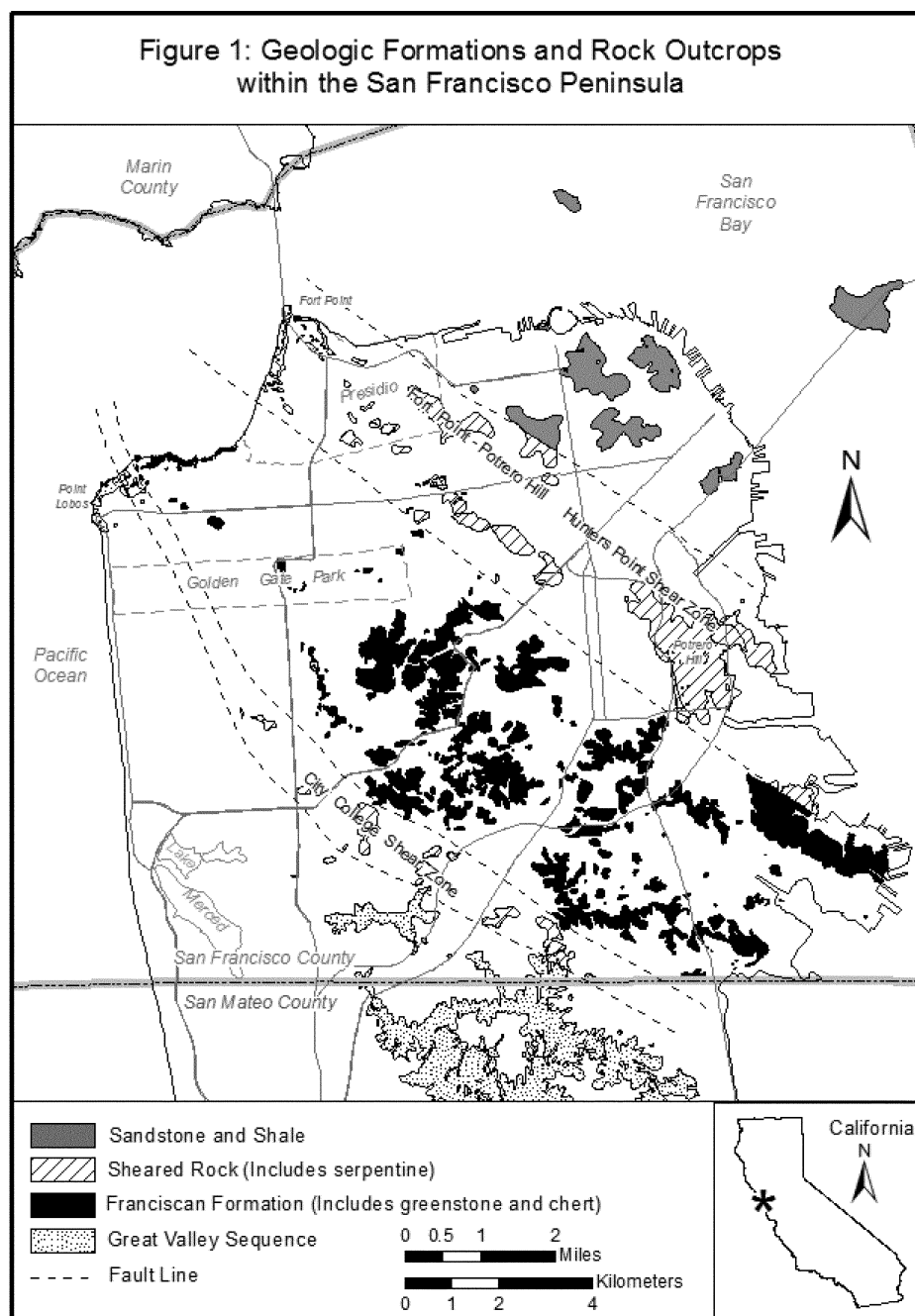
The current geographic distribution of *Arctostaphylos franciscana* has been greatly reduced by habitat loss in San Francisco. In 2009, the single remaining wild plant was discovered along the freeway access to the Golden Gate Bridge during construction activities and was transplanted to a natural area within the Presidio of San Francisco (Chasse *et al.* 2009, pp. 3–4, 10–11; Gluesenkamp *et al.* 2010, pp. 10–15). Historic populations of *A. franciscana*, as identified from herbarium records, occurred locally, often with the endangered *A. montana* ssp. *ravenii*. A single individual of *A. montana* ssp. *ravenii* exists in the wild today within the Presidio (44 FR 61910; October 26, 1979). Both manzanitas occurred on or near scattered exposures of bedrock outcrops (Behr 1892, pp. 2–6; Greene 1894, p. 232; Stewart 1918, p. 1; Service 1984, pp. 11–12; McCarten 1993, pp. 4–5).

Most bedrock outcrops of the interior parts of San Francisco are characterized by areas often at ridges with steep topography, thin dry soils, and bare rock, conditions that maintain permanently sparse vegetative cover, at least locally (Service 2003, p. 16). Many persist as undevelopable knobs on the crests of hills up to 281 meters (922 feet) above sea level, or as high, unstable, coastal bluffs subject to frequent landslides. They are composed mostly of serpentine and greenstone or other mafic and ultramafic rocks (Schlocker 1974, pp. 8–16, Plate 3). These serpentine and rocky areas are often harsh and contain unproductive soils with poor nutrient levels and reduced water-holding capacity (Holland 1986, p. 8; Sawyer and Keeler-Wolf 1997, p. 211; Chasse *et al.* 2009, pp. 12–13). McCarten (1993, pp. 4–5) identified some of the rock outcrops within the area as being sparsely vegetated with open barrens that may have historically contained *Arctostaphylos* species such as *A. montana* ssp. *ravenii* and “*A. hookeri* ssp. *franciscana* [*A. franciscana*].” He referred to the serpentine areas on the Presidio as “Decumbent Manzanita Serpentine Scrub” and stated that the plant community is one of the rarer plant communities in the area. Historically,

these areas included plant associations classified as coastal grassland (prairie) and variations of coastal scrub. Historic voucher specimens and observations cited *A. franciscana* occurring with *Quercus agrifolia* (coast live oak), *Ceanothus thyrsiflorus* (coast blue blossom), *Baccharis pilularis* (coyote brush), *Heteromeles arbutifolia* (toyon), *Ericameria* sp. (mock heather), *Eriogonum* sp. (buckwheat), and *Achillea* sp. (yarrow) (Eastwood 1905, pp. 201–202). The bedrock outcrop vegetation in San Francisco is variable today, including elements of remnant native vegetation as well as naturalized nonnative vegetation (National Park Service 1999, pp. 1, 17–18).

Some knowledge of the habitat requirements of *Arctostaphylos franciscana* can be inferred from historic locations and information on voucher specimens. The historic sites were mostly underlain by serpentine or greenstone substrates (Roof 1976, pp. 20–24). Sites which were occupied by *A. franciscana* historically were characterized as bare stony or rocky habitats often along ridges and associated with bedrock outcrops and other areas with thin soils on the San Francisco peninsula (Eastwood 1905, pp. 201–202; Brandegee 1907). Rowntree (1939, p. 121) observed *A. franciscana* “forming flat masses over serpentine outcroppings and humus-filled gravel and flopping down over the sides of gray and chrome rocks.” In a study to determine potential restoration sites for *A. montana* ssp. *ravenii*, the general site conditions identified included open exposures with mild slopes of shallow rocky soils with some coastal fog (McCarten 1986, pp. 4–5). These rocky outcrops within the San Francisco peninsula occur in the geologic strata known as the Franciscan formation. The Franciscan formation, which has contributed to the characteristic appearance and distribution of flora on portions of the peninsula, is a result of fault zones occurring in the area. These faults have uplifted and folded various geologic strata and formed the characteristic “islands” of rock outcrops and soils associated with *A. franciscana*. The thrust-fault shear zone runs across San Francisco from Potrero Hill in the southeast to the Presidio in the northwest (Schlocker 1974, pp. 1–2). Figure 1, below, identifies bedrock outcrops occurring in the San Francisco Peninsula.

Figure 1. Geologic Formations and Rock Outcrops within the San Francisco Peninsula



Franciscan formation rocks include sandstones, shale, chert, greenstone (mostly basalts), serpentinite, gabbro-diabase, and mixed sheared rocks along fault zones. The outcrops range from erosion-resistant basalt and chert, to serpentine rocks that are hard and dense to soft, friable, and plastic (Schlocker 1974, pp. 56–65). The soils surrounding the rock outcrops are often thin. Serpentine rocks and soils derived from them are particularly low in calcium and high in magnesium and heavy

metals, and greatly influence local vegetation. The majority of sites where *A. franciscana* was historically found occurred on serpentine outcrops, except at Mount Davidson, which is comprised of greenstone and mixed Franciscan rocks. The characteristics of serpentine soils or rock outcrops often result in exclusion or growth suppression of many plant species, creating open or barren areas that are not as subject to plant competition for light, moisture, and nutrients, which often causes

selection for a narrow range of endemic plant species such as *A. franciscana* (Raven and Axelrod 1978, pp. 24–26; Kruckeberg 1984, pp. 11–17; Service 1984, pp. 11–12; McCarten 1993, pp. 4–5; Service 1998, pp. 1–1, 1–2, 1–10–1–12; Service 2003, pp. 15–16). Therefore, based on the above information, we identify sites with open bedrock associated with serpentine or greenstone outcrops to be an essential physical or biological feature for this species.

## Open Habitat

As stated above, *Arctostaphylos franciscana* historically occurred in open or semi-open areas associated with rock outcroppings in coastal scrub or serpentine maritime chaparral. Although *A. franciscana* is considered to be endemic to serpentine soils (Kruckeberg 1984, pp. 11–17; Safford *et al.* 2005, p. 226), its historic occurrence at Mount Davidson on greenstone and at other locations on mixed Franciscan rocks, and its ability to grow at nursery locations (with management), calls into question such a strict edaphic affinity. McCarten (1993, p. 8) stated that the species most likely evolved in these open to semi-open, thin-soiled, nutrient-poor locations due to a response to lack of competition from nearby plants in better soil locations rather than a specific plant-serpentine soil relationship. Being more open, these sites are exposed to direct sun with little shading from nearby vegetation and are often dry. The nutrient-poor soils of these outcroppings also limit the number of other species able to tolerate these locations. Therefore, based on the information above, we identify areas with mostly full to full sun, which are open, barren, or sparse with minimal overstory or understory of vegetation to be an essential physical or biological feature for this species.

## Sites Exhibiting Necessary Physical or Biological Requirements

### Summer Fog

Summer fog is a climatic condition that characterizes many areas within the San Francisco Bay area, including the Presidio (Schlocker 1974, p. 6; Null 1995, p. 2). Summer fog increases humidity, moderates drought pressure, and provides for milder summer and winter temperature ranges than occur in interior coastal areas. Summer fog is a major influence on the survival and diversity of manzanitas and other vegetation within this zone (Patton 1956, pp. 113–200; McCarten 1986, p. 4; McCarten 1993, p. 2; Service 2003, p. 66; Chasse *et al.* 2009, p. 9; Johnstone and Dawson 2010, p. 5). The cooler temperatures and additional moisture availability during the summer may lessen the harsh site conditions of the thin-soiled, nutrient-poor, rock outcrops (Raven and Axlerod 1978, pp. 1, 25–26; Kruckeberg 1984, pp. 11–17). As a result, we have identified areas influenced by coastal summer fog to be an essential physical or biological feature for *Arctostaphylos franciscana*.

## Fungal Mycorrhizae Relationship

*Arctostaphylos* species form strong symbiotic relationships with over 100 different fungal mycorrhizae species (McCarten 1986, p. 4; Bruns *et al.* 2005, p. 33; Chase *et al.* 2009, p. 12). These fungi are located in the soil and form an ectomycorrhizal sheath around the host plant's roots (Salisbury and Ross 1985, pp. 116–118). The presence of these fungal mycorrhizae is essential for the plant because they assist in water and nutrient absorption (Bruns *et al.* 2002, pp. 352–353). The fungi form a network of connections within the soil to other plants (of the same or other species) and may play a major role in ecosystem sustainability, thereby leading to increased plant germination and vigor (Horton *et al.* 1999, p. 94; Simard and Durall 2004, pp. 1140–1141). As a result, we identify areas with a healthy fungal mycorrhizae component to be an essential physical or biological feature for *A. franciscana*.

## Pollinators

Pollinators have been observed on the wild *Arctostaphylos franciscana* plant; however, no surveys have been completed to identify the most important pollinators. The most frequent pollinators seen have been bees and bumblebees. Hummingbirds and butterflies have also been observed visiting the flowers, likely because few other plants are blooming during the winter months when *A. franciscana* blooms (Vasey, pers. comm. 2010).

Two recent studies of bee diversity have been conducted at several sites in the Presidio (Wood *et al.* 2005, entire; Van Den Berg *et al.* 2010, entire). The study conducted in 2004 (Wood *et al.* 2005, entire) established a baseline of species and numbers of bees found at nine sites on the Presidio. The study conducted in 2008 (Van Den Berg *et al.* 2010, entire) resampled three of these sites, which included the site near the wild *A. montana* ssp. *ravenii* plant, and added a new previously unsampled site. Overall, the average bee species richness and abundance at the three previously sample sites were greater in 2004 with 47 species and 1,283 individuals compared to 36 species and 878 individuals in 2008 (Van Den Berg *et al.* 2010, p. 4).

We are also aware of an initial study in which a Presidio staff person monitored the flowering times and abundances of *Arctostaphylos montana* ssp. *ravenii* and *A. franciscana*; and secondly, observed the abundance and diversity of likely pollinators visiting each plant (Gambel 2012, p. 3). The mid-winter to early spring flowering

times of the *Arctostaphylos* coincided with bumble bee emergence times. Bee abundance and open flower abundance both spiked in early March. Most of the bumble bees were identified by Dr. Hafernik and Jess Gambel as Vosnesensky bumble bee (*Bombus vosnesenskii*) or black-tailed bumble bee (*Bombus melanopygus*), although other similar species may also have been present (Gambel 2012, p. 17).

In a study on *Arctostaphylos patula* in northern California, 3 solitary bees (Halictidae and Andrenidae), 2 long-tongued bees (Anthophoridae), 1 honey bee (Apidae), and 4 bumble bees (Apidae) were observed pollinating that species (Valenti *et al.* 1997, p. 4), which is in addition to the 27 other hymenopteran species previously documented by species experts (Krombein *et al.* 1979, entire). These pollinators are important as they are able to travel long distances and cross fragmented landscapes to pollinate *A. franciscana*. Conserving habitat where these pollinators nest and forage will sustain an active pollinator community and facilitate mixing of genes within and among plant populations, without which inbreeding and reduced fitness may occur (Widen and Widen 1990, p. 191).

Pollinators also require space for individual and population growth, so adequate habitat should be available for pollinators in addition to the habitat necessary for *Arctostaphylos franciscana* plants.

In this critical habitat rule, we acknowledge that healthy pollinator populations provide conservation value to *Arctostaphylos franciscana*. However, we do not currently include areas for pollinators and their habitats within this designation, because: (1) We have only initial information on likely pollinators and their habitat needs are lacking; and (2) We were not able to quantify the amount of habitat needed for pollinators, given the preliminary nature of information on the specific pollinators of *A. franciscana*.

## Habitats Representative of the Historical, Geographical, and Ecological Distribution of the Species

The type locality (the geographical location where a type specimen was originally found) for *Arctostaphylos franciscana* is the former Laurel Hill Cemetery (Eastwood 1905, pp. 201–202), an area south of the Presidio between California Street and Geary Boulevard. Voucher specimens for *A. franciscana* also exist from exposed slopes of Mount Davidson (Roof 1976, pp. 21–24), and reliable observations are recorded from the former Masonic

Cemetery (bounded by Turk Street, Masonic Avenue, Park Avenue, and Fulton Street near Lone Mountain) (Roof 1976, pp. 21–24). Behr (1892, pp. 2–6) observed a possible fourth historic occurrence near the former Protestant Orphan Asylum near Laguna and Haight Streets. All these sites have been lost due to development, except for the Mount Davidson location, which has mostly been altered and converted to nonnative habitat. The “rediscovery site” at Doyle Drive near the Golden Gate Bridge has also been lost due to freeway construction (Gluesenkamp *et al.* 2010, pp. 9–10; Park Presidio 2012, pp. 1–2). The lone “wild” *A. franciscana* shrub has been transplanted to a site within the Presidio (Gluesenkamp *et al.* 2010, pp. 10–15). Development and habitat alteration from human activities and introduction of nonnative plant species have greatly altered the majority of remaining habitat for the species, although some appropriate habitat for the species still remains within the San Francisco peninsula. As a result, we have identified the species’ general range to include only the area within the San Francisco peninsula from the Presidio of San Francisco south to Mount Davidson. Although additional sites outside the San Francisco peninsula, but within the Bay Area, contain appropriate habitat characteristics, these areas are outside the known historic range of the species, and we are not designating these areas as critical habitat at this time.

#### Primary Constituent Elements for *Arctostaphylos franciscana*

Under the Act and its implementing regulations, we are required to identify the physical and biological features essential to the conservation of *Arctostaphylos franciscana* in areas occupied at the time of listing (i.e., areas that are currently occupied), focusing on the features’ primary constituent elements. We consider primary constituent elements (PCEs) to be the elements of physical and biological features that provide for a species’ life-history processes and that are essential to the conservation of the species.

With this designation of critical habitat, we intend to identify the physical or biological features essential to the conservation of the species, through the identification of the features’ primary constituent elements sufficient to support the life-history processes of the species. Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species’ life-history processes, we determine that the primary constituent

elements specific to self-sustaining *Arctostaphylos franciscana* populations are:

- (1) Areas on or near bedrock outcrops often associated with ridges of serpentine or greenstone, mixed Franciscan rocks, or soils derived from these parent materials.
- (2) Areas having soils originating from parent materials identified above in PCE 1 that are thin, have limited nutrient content or availability, or have large concentrations of heavy metals.
- (3) Areas within a vegetation community consisting of a mosaic of coastal scrub, serpentine maritime chaparral, or serpentine grassland characterized as having a vegetation structure that is open, barren, or sparse with minimal overstory or understory of trees, shrubs, or herbaceous plants, and that contain and exhibit a healthy fungal mycorrhizae component.
- (4) Areas that are influenced by summer fog, which limits daily and seasonal temperature ranges, provides moisture to limit drought stress, and increases humidity.

#### Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection. The features essential to the conservation of this species may require special management considerations or protection to reduce the direct and indirect effects associated with the following threats: Habitat loss and degradation from development or human activities; competition from nonnative plants; small population size; and soil compaction, overutilization, disease introduction, or vandalism from visitor use. Please refer to the final listing rule published on September 5, 2012, in the **Federal Register** (77 FR 54434) for a complete description of these threats.

Special management to protect the features essential to the conservation of the species from the effects identified above may include (but are not limited to) actively managing appropriate open space areas, limiting disturbances to and within suitable habitats, and evaluating the need for and potentially conducting restoration or revegetation of areas inhabited by *Arctostaphylos franciscana*.

#### Criteria Used To Identify Critical Habitat

As required by section 4(b)(1)(A) of the Act, we used the best scientific and commercial data available to designate critical habitat. We review available information pertaining to the habitat requirements of the species. In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we consider whether designating additional areas—outside those currently occupied as well as those occupied at the time of listing—are necessary to ensure the conservation of the species. We are designating critical habitat in areas within the geographical area occupied by the species at the time of listing in 2012. We also are designating specific areas outside the geographical area occupied by the species at the time of listing, that were historically occupied, but are presently unoccupied, because we have determined that such areas are essential for the conservation of the species.

This section provides details of the criteria and process we used to delineate the critical habitat for *Arctostaphylos franciscana*. The areas designated as critical habitat within this rule are based largely on habitat characteristics identified from the “rediscovery site” near Doyle Drive, the currently occupied transplantation site, and historically occupied areas identified in voucher specimens and historical records. We also used the Recovery Plan for Coastal Plants of the Northern San Francisco Peninsula (Service 2003, pp. 1–322); the Final Franciscan Manzanita Conservation Plan (Chasse *et al.* 2009, pp. 1–44); the Raven’s Manzanita Recovery Plan (Service 1984, pp. 1–73), which provides habitat characteristics of the historically co-occurring species; and information received from peer reviewers and the public on our proposed listing for *A. franciscana* (76 FR 55623; September 8, 2011). Due to the rapid development of the San Francisco peninsula and limited historical information on plant location and distribution, it is difficult to determine the exact range of the species. Given the amount of remaining habitat available with the appropriate characteristics, we looked at all areas within San Francisco County, California, that met our criteria as potential habitat. Based on this information, we are designating as critical habitat areas within the geographical area currently occupied by *A. franciscana* (which is the same as the geographical area occupied by the species at the time of listing) and

unoccupied areas that are essential for the conservation of the species. See the *Distribution and Habitat* section in the proposed critical habitat rule for more information on the range of the species (77 FR 54517; September 5, 2012).

Although a recovery plan for *Arctostaphylos franciscana* has not been developed, the species is discussed along with the endangered *A. montana* ssp. *ravenii* in the Recovery Plan for Coastal Plants of the Northern San Francisco Peninsula (Service 2003). The recovery plan calls for a three-part strategy in conserving *A. montana* ssp. *ravenii*, as well as additional recommendations for establishment in areas outside the Presidio at historic and other rock outcrop sites in conjunction with *A. franciscana* (Service 2003, pp. 75–77). The strategy includes: (1) Protecting the existing plant and surrounding habitat; (2) increasing the number of independent populations throughout suitable habitat within the Presidio; and (3) restoring the natural ecological interactions of the species with its habitat, including allowing gene flow with *A. franciscana*. As mentioned above, the recovery plan also identifies establishing additional areas within rock outcrops throughout suitable habitat along with populations of *A. franciscana*. We believe that a recovery strategy for *A. franciscana* would have many aspects similar to the recovery plan for *A. montana* ssp. *ravenii* based on the two species being limited to one “wild” individual, their co-occurrence in similar habitat within the Presidio and elsewhere at historical locations, and the seeming dependence of *A. montana* ssp. *ravenii* on *A. franciscana* to produce viable seed and maintain gene flow with *A. franciscana* in the absence of more than the single individual or clones of *A. montana* ssp. *ravenii*. In order to accomplish portions of this strategy, we have identified areas we believe are essential to the conservation of *A. franciscana* through the following criteria:

(1) Determine, in accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, the physical or biological habitat features essential to the conservation of the species and which may require special management considerations or protection, as explained in the previous section.

(2) Identify multiple independent sites for *A. franciscana*. These sites should be throughout the historic range of the species (generally on the San Francisco peninsula north of Mount Davidson) within or near rock outcrops of various origins but especially on ridges or slopes within serpentine or

greenstone formations along the Franciscan fault zone between Potrero Hills and the Golden Gate (see Figure 1, above).

(3) In accordance with section 2(b) of the Act, select areas which will conserve the ecosystem upon which the species depends. This includes areas that contain the natural ecological interactions of the species with its habitat or areas with additional management that may be enhanced. The conservation of *A. franciscana* is dependent on several factors including, but not limited to, selection of areas of sufficient size and configuration to sustain natural ecosystem components, functions, and processes (such as full sun exposure, summer fog, natural fire and hydrologic regimes, intact mycorrhizal or edaphic interactions); protection of existing substrate continuity and structure; connectivity among groups of plants of this species within geographic proximity to facilitate gene flow among the sites through pollinator activity and seed dispersal; and sufficient adjacent suitable habitat for vegetative reproduction and population expansion.

(4) In selecting areas to designate as critical habitat, consider factors such as size, connectivity to other habitats, and rangewide recovery considerations. We rely upon principles of conservation biology, including: (a) Resistance and resiliency, to ensure sufficient habitat is protected throughout the range of the species to support population viability (e.g., demographic parameters); (b) Redundancy, to ensure multiple viable populations are conserved throughout the species’ range; and (c) representation, to ensure the representative genetic and life history of *A. franciscana* are conserved.

#### Methods

In order to identify the physical or biological features on the ground based on our criteria outlined above, we used the following methods to delineate the critical habitat:

(1) We compiled and reviewed all available information on *Arctostaphylos franciscana* habitat and distribution from historic voucher specimens, literature, and reports;

(2) We also compiled and reviewed all available information on *A. montana* ssp. *ravenii* habitat and distribution from similar sources, as these two species have similar habitat requirements and often occurred together historically;

(3) We reviewed available information on rock outcrops, bedrock, and areas identified as serpentine, greenstone, or of Franciscan formation within the San

Francisco peninsula and surrounding areas south of Mount Davidson and north into Marin County to determine the extent of these features on the landscape;

(4) We compiled species occurrence information including historic record locations, the current occupied site within the Presidio, and information on the “rediscovery site” near Doyle Drive;

(5) We then compiled all this information into a GIS database using ESRI ArcMap 10.0; and

(6) We screen digitized and mapped the specific areas on which are found those physical or biological features essential to the conservation of the species or other areas determined to be essential for the conservation of the species.

When determining critical habitat boundaries within this final rule, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features for *Arctostaphylos franciscana*. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps for of this final rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

The critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public at <http://www.regulations.gov> at Docket No. FWS–R8–ES–2012–0067, on our Internet site at <http://www.fws.gov/sacramento/>, and at the field office responsible for the designation (see **FOR FURTHER INFORMATION CONTACT**, above).

We are designating as critical habitat lands that we have determined are occupied at the time of listing and contain sufficient physical or biological features to support life-history processes essential for the conservation of the



species, and lands outside of the geographical area occupied at the time of listing that we have determined are essential for the conservation of *Arctostaphylos franciscana*.

Units are designated based on sufficient elements of physical or biological features being present to support *Arctostaphylos franciscana*'s life processes. Some units contain all of the identified elements of physical or biological features and support multiple life processes. Some segments contain only some elements of the physical or biological features necessary to support *A. franciscana*'s particular use of that habitat.

### Final Critical Habitat Designation

We are designating 12 units as critical habitat for *Arctostaphylos franciscana*. The critical habitat areas described below constitute our best assessment at this time of areas that meet the definition of critical habitat. Those 12 units are: (1) Fort Point Unit, (2) Fort Point Rock Unit, (3) World War II Memorial Unit, (4) Immigrant Point Unit, (5) Inspiration Point Unit, (6) Corona Heights Unit, (7) Twin Peaks Unit, (8) Mount Davidson Unit, (9) Diamond Heights Unit, (11) Bayview Park Unit, (12) McLaren Park East Unit, and (13) McLaren Park West Unit. Table 1 shows the occupancy status of each unit. The approximate area of each critical habitat unit is shown in Table 2.

TABLE 1—OCCUPANCY OF ARCTOSTAPHYLOS FRANCISCANA BY DESIGNATED CRITICAL HABITAT UNITS

Unit	Occupied at time of listing?	Currently occupied?
1. Fort Point .....	No	No.
2. Fort Point Rock.	No	Yes.
3. World War II Memorial.	No	No.
4. Immigrant Point.	No	No.
5. Inspiration Point.	Yes	Yes.
6. Corona Heights.	No	No.
7. Twin Peaks ...	No	No.
8. Mount Davidson.	No	No.
9. Diamond Heights.	No	No.
11. Bayview Park.	No	No.
12. McLaren Park East.	No	No.
13. McLaren Park West.	No	No.

TABLE 2—DESIGNATED CRITICAL HABITAT UNITS FOR ARCTOSTAPHYLOS FRANCISCANA

[Area estimates reflect all land within critical habitat unit boundaries]

Critical habitat unit	Land ownership by type	Acres (hectares)
1. Fort Point .....	Federal ....	7.7 (3.1)
	State .....	0
	Local .....	0
	Private ....	0
2. Fort Point Rock.	Federal ....	21.6 (8.7)
	State .....	0
	Local .....	0
	Private ....	0
3A. World War II Memorial.	Federal ....	0.8 (0.3)
	State .....	0
	Local .....	0
	Private ....	0
3B. World War II Memorial.	Federal ....	1.1 (0.5)
	State .....	0
	Local .....	0
	Private ....	0
4A. Immigrant Point.	Federal ....	0.4 (0.2)
	State .....	0
	Local .....	0
	Private ....	0
4B. Immigrant Point.	Federal ....	1.1 (0.4)
	State .....	0
	Local .....	0
	Private ....	0
5A. Inspiration Point.	Federal ....	11.8 (4.8)
	State .....	0
	Local .....	0
	Private ....	0
5B. Inspiration Point.	Federal ....	2.1 (0.9)
	State .....	0
	Local .....	0
	Private ....	0
6. Corona Heights.	Federal ....	0
	State .....	0
	Local .....	5.2 (2.1)
	Private ....	0
7. Twin Peaks ...	Federal ....	0
	State .....	0
	Local .....	42.2 (17.1)
	Private ....	1.6 (0.6)
8. Mount Davidson.	Federal ....	0
	State .....	0
	Local .....	6.5 (2.6)
	Private ....	0.6 (0.3)
9A. Diamond Heights.	Federal ....	0 (0)
	State .....	0 (0)
	Local .....	19.1 (7.7)
	Private ....	0
9B. Diamond Heights.	Federal ....	0 (0)
	State .....	0 (0)
	Local .....	3.9 (1.6)
	Private ....	0 (0)
9C. Diamond Heights.	Federal ....	0 (0)
	State .....	0 (0)
	Local .....	10.5 (4.3)
	Private ....	0.8 (0.3)
11. Bayview Park.	Federal ....	0
	State .....	0
	Local .....	34.7 (14.0)
	Private ....	7.8 (3.1)
12A. McLaren Park East.	Federal ....	0 (0)
	State .....	0 (0)
	Local .....	13.4 (5.4)
	Private ....	0 (0)
12B. McLaren Park East.	Federal ....	0 (0)
	State .....	0 (0)

TABLE 2—DESIGNATED CRITICAL HABITAT UNITS FOR ARCTOSTAPHYLOS FRANCISCANA—Continued

[Area estimates reflect all land within critical habitat unit boundaries]

Critical habitat unit	Land ownership by type	Acres (hectares)
13. McLaren Park West.	Local .....	11.6 (4.7)
	Private ....	0 (0)
	Federal ....	0 (0)
	State .....	0 (0)
	Local .....	25.7 (10.4)
	Private ....	*0 (0)
Total .....	Federal ....	46.6 (18.9)
	State .....	0
	Local .....	172.8 (69.9)
	Private ....	10.8 (4.3)
	Total .....	230.2 (93.1)

**Note:** Area sizes may not sum due to rounding.

\*Acreages are carried out to one decimal place to show small units. Areas less than 0.1 ac (0.04 ha) are denoted as 0.

We present brief descriptions of the designated critical habitat units for *Arctostaphylos franciscana* and the reasons why they meet the definition of critical habitat, below. Acreage or hectare totals may not sum due to rounding.

#### Unit 1: Fort Point

Unit 1 consists of 7.7 ac (3.1 ha) and is located within the Presidio east of the Golden Gate Bridge and north of Doyle Dr. along Long Ave. and Marine Dr. This unit is currently unoccupied. The unit is within an area that experiences summer fog, and contains serpentine and Franciscan Complex bedrock outcrops, soils derived from these formations, and native maritime chaparral habitat. The unit represents one of the northern-most areas identified for the species. We have determined that the area is essential for the conservation of the species, because it provides one of multiple independent sites for *Arctostaphylos franciscana* and contains some of the last remaining appropriate habitat within the area.

#### Unit 2: Fort Point Rock

Unit 2 consists of 21.6 ac (8.7 ha) and is located within the Presidio west of the Golden Gate Bridge and west of Lincoln Blvd. The unit extends from the Toll Plaza south to Kobbe Ave. This unit is currently occupied, although it was not occupied at the time of listing. The unit is within an area that experiences summer fog, and contains serpentine and Franciscan Complex bedrock outcrops, soils derived from these formations, and native maritime chaparral habitat along the coastal

bluffs. The unit represents one of the northern-most areas identified for the species. We have determined that the area is essential for the conservation of the species, because it provides one of multiple independent sites for *Arctostaphylos franciscana* and contains some of the last remaining appropriate habitat within the area.

#### *Unit 3: World War II Memorial*

Unit 3 consists of a total of 1.9 ac (0.8 ha). The unit is located within the Presidio at the intersection of Lincoln Blvd. and Kobbe Ave. The unit is comprised of two subunits. Subunit 3A (0.8 ac (0.3 ha)) is located west of Lincoln Blvd., and subunit 3B (1.1 ac (0.5 ha)) is located east of Lincoln Blvd. This unit is currently unoccupied. The unit is along the coastal bluffs within an area that experiences summer fog, and contains serpentine and Franciscan Complex bedrock outcrops, soils derived from these formations, and native maritime chaparral habitat. We have determined that the area is essential for the conservation of the species, because it provides for one of multiple independent sites for *Arctostaphylos franciscana* and contains some of the last remaining appropriate habitat within the area.

#### *Unit 4: Immigrant Point*

Unit 4 consists of a total of 1.5 ac (0.6 ha). The unit is located within the Presidio along Washington Blvd. east of Lincoln Blvd. and north of Compton Rd. The unit is comprised of two subunits. Subunit 4A (0.4 ac (0.2 ha)) is located west of Washington Blvd., and subunit 4B (1.1 ac (0.4 ha)) is located east of Washington Blvd. This unit is currently unoccupied. The unit is located along the coastal bluffs within an area that experiences summer fog, and contains serpentine and Franciscan Complex bedrock outcrops, soils derived from these formations, and native maritime chaparral habitat. We have determined that the area is essential for the conservation of the species, because it provides for one of multiple independent sites for *Arctostaphylos franciscana* and contains some of the last remaining appropriate habitat within the area.

#### *Unit 5: Inspiration Point*

Unit 5 consists of a total of 13.9 ac (5.7 ha). The unit is within the Presidio and is located north of Pacific Ave. and east of Arguello Blvd. The unit is comprised of two subunits, which are adjacent to each other. Subunit 5A (11.8 ac (4.8 ha)) and subunit 5B (2.1 ac (0.9 ha)) are located east of Arguello Blvd., but the two areas are separated by an

access road. This unit is currently occupied and was occupied at the time of listing. The unit contains the physical or biological features essential to the conservation of the species. The unit is within an area that experiences summer fog, and is located on sloping terrain containing serpentine and Franciscan Complex bedrock outcrops, soils derived from these formations, and native maritime chaparral habitat.

The physical and biological features essential to the conservation of the species in this unit may require special management considerations or protection to address threats from habitat loss, degradation, or alteration due to development or other human activities; competition from nonnative plants; small population size and curtailment of the species' range; and various other human-induced factors such as soil compaction, potential overutilization, disease, or vandalism from visitor use. Please see the *Special Management Considerations or Protection* section of this final rule for a discussion of the threats to *Arctostaphylos franciscana* habitat and potential management considerations.

#### *Unit 6: Corona Heights*

Unit 6 consists of 5.2 ac (2.1 ha) and is located northwest of Castro and 17th Streets adjacent to Roosevelt and Museum Way. This unit is currently unoccupied. The unit is within an area that experiences summer fog, and is located on sloping terrain that contains Franciscan Complex (greenstone) bedrock outcrops of chert or volcanic materials, soils derived from these formations, and open grassland habitat. The unit represents one of several areas identified for the species within the Mount Davidson area. The units in this area would assist in establishing populations of *Arctostaphylos franciscana* outside the Presidio. As a result, we have determined that the area is essential for the conservation of the species, because it provides for one of multiple independent sites for *A. franciscana* and contains some of the last remaining appropriate habitat within the area.

#### *Unit 7: Twin Peaks*

Unit 7 consists of 43.8 ac (17.7 ha) along the hilltop of Twin Peaks along Twin Peaks Blvd. west of Market St. This unit is currently unoccupied. The unit is within an area that experiences summer fog; is located on sloping terrain; and contains Franciscan Complex (greenstone) bedrock outcrops of chert or volcanic materials, soils derived from these formations, and open grassland habitat. The unit represents

one of several areas identified for the species within the Mount Davidson area. The units in this area would assist in establishing populations of *Arctostaphylos franciscana* outside the Presidio. As a result, we have determined that the area is essential for the conservation of the species, because it provides for one of multiple independent sites for *A. franciscana* and contains some of the last remaining appropriate habitat within the area.

#### *Unit 8: Mount Davidson*

Unit 8 consists of 7.1 ac (2.9 ha) and is located on the eastern slope of Mount Davidson near Myra Way and Molimo Dr. This unit is currently unoccupied. The unit is within an area that experiences summer fog, and is located on sloping terrain containing Franciscan Complex (greenstone) bedrock outcrops of chert and sedimentary materials, soils derived from these formations, and open grassland habitat. Mount Davidson is the only known site still remaining that was previously occupied by the species. The reestablishment of populations of *Arctostaphylos franciscana* at this and surrounding units would assist in establishing multiple populations of *A. franciscana* outside the Presidio. As a result, we have determined that the area is essential for the conservation of the species, because it provides for one of multiple independent sites for *A. franciscana* and contains the last remaining historic occurrence for the species.

#### *Unit 9: Diamond Heights*

Unit 9 consists of a total of 34.3 ac (13.9 ha) and is located near Diamond Heights Blvd. south of Turquoise Way, and O'Shaughnessy Blvd. This unit is comprised of three subunits. Subunit 9A (19.1 ac (7.7 ha)) is located near Diamond Heights Blvd. south of Turquoise Way. Subunit 9B (3.9 ac (1.6 ha)) is located east of O'Shaughnessy Blvd., and subunit 9C (11.3 ac (4.6 ha)) is located west of O'Shaughnessy Blvd. Unit 9 is currently unoccupied. The unit is within an area that experiences summer fog; is located on sloping terrain; and contains Franciscan Complex (greenstone) bedrock outcrops of chert, volcanic, and sedimentary materials, as well as soils derived from these formations and open grassland habitat. The unit represents one of several areas identified for the species within the Mount Davidson area. Mount Davidson is the only site still remaining that was known to be previously occupied by the species. The units in this area would assist in establishing populations of *Arctostaphylos franciscana* outside the Presidio. The

additional subunits provide additional rock outcrop areas within the matrix of natural land. As a result, we have determined that the area is essential for the conservation of the species, because it provides for one of multiple independent sites for *A. franciscana* and contains some of the last remaining appropriate habitat within the area.

#### Unit 10: Bernal Heights

We have determined that the area we proposed at Bernal Heights (14.9 ac (6.0 ha)), which is not occupied at the time of listing, is highly degraded and does not meet our criteria for designating areas as critical habitat. As a result, we have determined that this unit is not essential for the conservation of the species, and we are not including Unit 10 in the critical habitat designation.

#### Unit 11: Bayview Park

Unit 11 consists of 42.5 ac (17.1 ha) and is located at Bayview Park west of Candlestick Park and east of U.S. Highway 101. This unit is currently unoccupied. This unit is considered outside the range of the species but still within the same Franciscan fault zone as historic populations. The unit is within an area that experiences summer fog; is located on sloping terrain; and contains Franciscan Complex (greenstone) bedrock outcrops of chert, volcanic, and sedimentary materials, as well as soils derived from these formations and open grassland habitat. The unit represents one site identified for the species outside the Presidio and Mount Davidson area. Due to the rapid development of the San Francisco peninsula and limited historical information on plant location and distribution, it is difficult to determine the exact range of the species. Given the amount of remaining habitat available with the appropriate characteristics, we looked at all areas within San Francisco that met our criteria as potential habitat. Including this unit would assist in establishing an additional population of *Arctostaphylos franciscana* outside the Presidio and Mount Davidson areas. As a result, we have determined that the area is essential for the conservation of the species, because it provides for one of multiple independent sites for *A. franciscana* and contains some of the last remaining appropriate habitat for the species within the area.

#### Unit 12: McLaren Park East

Unit 12 consists of a total of 25.0 ac (10.1 ha) and is located at McLaren Park south of Mansell St. near Visitacion Ave. This unit is comprised of two subunits. Subunit 12A (13.4 ac (5.4 ha)) is located south of Mansell St. and west

of Visitacion Ave. Subunit 12B (11.6 ac (4.7 ha)) is located south of Mansell St. and east of Visitacion Ave. This unit is currently unoccupied. The unit is within an area that experiences summer fog and is located on sloping terrain. It contains Franciscan Complex (greenstone) bedrock and serpentine outcrops, soils derived from these formations, and open grassland habitat. This unit will assist in establishing an additional population of *Arctostaphylos franciscana* outside the Presidio and Mount Davidson areas. This unit and Unit 13 (McLaren Park West) are located roughly midway between the remaining appropriate habitat at Diamond Heights and Bayview Park and thereby provide increased connectivity between these units. As a result, we have determined that the area is essential for the conservation of the species, because it provides for one of multiple independent sites for *A. franciscana*, contains some of the last remaining appropriate habitat within the area, and provides connectivity between Unit 9 (Diamond Heights) and Unit 11 (Bayview Park).

#### Unit 13: McLaren Park West

Unit 13 consists of 25.7 ac (10.4 ha) and is located at McLaren Park between Geneva Ave. and Sunnysdale Ave. This unit is currently unoccupied. The unit is within an area that experiences summer fog; is located on sloping terrain; and contains Franciscan Complex (greenstone) bedrock outcrops of volcanic materials, soils derived from these formations, and open grassland habitat. This unit will assist in establishing additional populations of *Arctostaphylos franciscana* outside the Presidio and Mount Davidson areas. This unit and Unit 12 (McLaren Park East) are located roughly midway between remaining appropriate habitat at Diamond Heights and Bayview Park. As a result, we have determined that the area is essential for the conservation of the species, because it provides for one of multiple independent sites for *A. franciscana*, contains some of the last remaining appropriate habitat within the area, and provides connectivity between Unit 9 (Diamond Heights) and Unit 11 (Bayview Park).

### Effects of Critical Habitat Designation

#### Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or

adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our regulatory definition of “destruction or adverse modification” (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F. 3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on Federal, State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a

listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency’s discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

#### *Application of the “Adverse Modification” Standard*

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical or biological features to an extent that appreciably reduces the conservation value of critical habitat for *Arctostaphylos franciscana*. As discussed above, the role of critical habitat is to support life-history needs of

the species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for *Arctostaphylos franciscana*. These activities include, but are not limited to:

(1) Actions that result in ground disturbance. Such activities could include (but are not limited to) residential or commercial development, off-highway vehicle activity, pipeline construction, new road construction or widening, and existing road maintenance. These activities potentially impact the habitat and PCEs of *A. franciscana* by damaging, disturbing, and altering soil composition through direct impacts, increased erosion, and increased nutrient content from nitrogen deposition in urban areas (primarily from cars and trucks). Additionally, changes in soil composition may lead to changes in the vegetation composition, thereby changing the overall habitat type. Actions that result in ground disturbance may also have a high risk for introducing soilborne *Phytophthora* spp., especially through the movement of infested soil brought in as fill or on vehicle tires.

(2) Actions that result in alteration of the hydrological regimes typically associated with *A. franciscana* habitat. Such activities could include residential or commercial development, which may increase summer watering. These activities could alter natural plant populations adapted to summer drought, disrupt mycorrhizal interactions, increase disease, and promote establishment of nonnative vegetation.

(3) Actions that increase nutrient deposition to the point at which nutrient-loving plants not adapted to serpentine or rocky outcrops become established and compete with *A. franciscana* and adjacent vegetation communities. Such activities could include (but are not limited to) use of chemical fertilizers within the areas, increased nitrogen deposition from atmospheric sources (vehicles, industry), and unauthorized dumping.

(4) Actions that increase the likelihood of spread of disease from *Phytophthora* spp. such activities include (but are not limited to) the

planting of *Phytophthora*-infested plant material on or adjacent to critical habitat. This may include landscaping installed beyond critical habitat units, especially uphill, or nursery stock plantings within the critical habitat (potentially including *A. franciscana* seedlings used for restoration plantings).

#### **Exemptions**

##### *Application of Section 4(a)(3) of the Act*

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

(1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;

(2) A statement of goals and priorities;

(3) A detailed description of management actions to be implemented to provide for these ecological needs; and

(4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.”

There are no Department of Defense lands with a completed INRMP within the critical habitat designation for *Arctostaphylos franciscana*. Therefore, we are not exempting lands from this

final designation of critical habitat for *Arctostaphylos franciscana* pursuant to section 4(a)(3)(B)(i) of the Act.

#### Exclusions

##### *Application of Section 4(b)(2) of the Act*

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. The statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor in making that determination.

Under section 4(b)(2) of the Act, the Secretary may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise his discretion to exclude the area only if such exclusion would not result in the extinction of the species.

##### *Exclusions Based on Economic Impacts*

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we prepared DEA of the proposed critical habitat designation and related factors (RTI International 2013a). The DEA, dated March 2013, was made available for public review from June 28, 2013, through July 29, 2013 (78 FR 38897). Following the close of the comment period, a FEA (November 2013) of the potential economic effects of the designation was developed, taking into consideration the public comments and any new information (RTI International 2013b).

The intent of the FEA is to quantify the economic impacts of all potential conservation efforts for *Arctostaphylos franciscana*; some of these costs will likely be incurred regardless of whether we designate critical habitat (baseline). The economic impact of the final critical habitat designation is analyzed by comparing scenarios both “with critical habitat” and “without critical habitat.” The “without critical habitat” scenario represents the baseline for the analysis, considering protections already in place for the species (e.g., under the Federal listing and other Federal, State, and local regulations). The baseline, therefore, represents the costs incurred regardless of whether or not critical habitat is designated. The “with critical habitat” scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental impacts and associated conservation efforts are those not expected to occur absent the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat above and beyond the baseline costs; these are the costs we consider in the final designation of critical habitat. The analysis looks retrospectively at baseline impacts incurred since the species was listed, and forecasts both baseline and incremental impacts likely to occur with the designation of critical habitat.

The FEA also addresses how potential economic impacts are likely to be distributed, including an assessment of any local or regional impacts of habitat conservation and the potential effects of conservation activities on government agencies, private businesses, and individuals. The FEA measures lost economic efficiency associated with residential and commercial development and public projects and activities, such as economic impacts on water management and transportation projects, Federal lands, small entities, and the energy industry. Decision-makers can use this information to assess whether the effects of the designation might unduly burden a particular group or economic sector. Finally, the FEA looks retrospectively at costs that have been incurred since 2012 (year of the species’ listing) (77 FR 54434), and considers those costs that may occur in the 20 years following the designation of critical habitat, which was determined to be the appropriate period for analysis because limited planning information was available for most activities to forecast activity levels

for projects beyond a 20-year timeframe. The FEA quantifies economic impacts of *Arctostaphylos franciscana* conservation efforts associated with the following categories of activity: National Park and Presidio Trust management and habitat restoration activities; road maintenance and construction; broadcast facility maintenance and construction; trail maintenance; and species reintroduction.

The FEA estimates the total incremental impacts over the next 20 years (2013 to 2032) to activities in areas designated as critical habitat to be approximately \$19,617 (\$981 annualized) in present-value terms applying a 7 percent discount rate (RTI International 2013b, p. ES–2); the total undiscounted incremental costs are approximately \$31,435. The primary incremental economic impacts are administrative costs associated with section 7 consultations with the National Park Service (NPS) and the Presidio Trust on their activities within the three relevant unoccupied critical habitat units (Units 1, 3, and 4).

Administrative costs associated with section 7 consultations on a variety of NPS and Presidio Trust activities (including NPS and Presidio Trust management plans, soil remediation, and unspecified activities) on Federal lands in unoccupied critical habitat Units 1, 3, and 4 account for most of the forecast incremental impacts (RTI International 2013b, ES–3). The largest incremental economic impacts are associated with informal section 7 consultations with NPS and the Presidio Trust for unspecified activities within Units 1–5; these unspecified consultations are expected to total \$24,248 (undiscounted) over the 20-year period distributed evenly among all designated units within the Presidio. Section 7 consultations with NPS and the Presidio Trust for soil remediation activities within Unit 1 are expected to total \$4,041 over the 20-year period (all soil remediation activities are anticipated to occur within the first year and, therefore, are not discounted).

Federally funded trail maintenance on SFRPD lands within unoccupied critical habitat Units 12 and 13 was conservatively included in the analysis due to the potential that SFRPD might apply within the next 20 years for Federal grant money to update trails in these units (RTI International 2013b, p. 3–7). These consultation costs are expected to total \$2,690 (undiscounted) over the next 20 years distributed evenly between the two units. The SFRPD is estimated to incur undiscounted costs of approximately \$641 from these consultations.

The smallest incremental economic impact is associated with the reinitiation of section 7 consultation with NPS and the Presidio Trust for their management plans within critical habitat Units 1 through 5. This consultation is expected to total \$114 over the 20-year period, and is distributed evenly among the five units (the reinitiation of consultation on the NPS and Presidio Trust management plans is anticipated to occur within the first year and, therefore, is not discounted).

With regard to other activities on non-Federal lands, the potential for Federal nexus is very low. Therefore, no consultations were estimated for miscellaneous activities on non-Federal land within Units 6–9 and 11. Thus, there are no anticipated incremental economic impacts associated with the designation of critical habitat within Units 6–9 and 11. The only other consultations that may be anticipated on non-Federal lands include reintroduction of *A. franciscana* into areas where other endangered species, such as the mission blue butterfly, are present. Reintroduction consultations are likely to be intra-Service, and costs are likely to be minimal and administrative in nature. Furthermore, the costs would be considered baseline costs.

Regarding road maintenance and construction, the California Department of Transportation indicated in personal communication that any projects on the roads adjacent to the units would not likely affect *A. franciscana* or its critical habitat; additionally, no projects are anticipated (RTI International 2013b, pp. 3–1, 3–6). Similarly, no maintenance and construction projects related to radio and broadcast towers are expected to affect designated critical habitat (RTI International 2013b, pp. 3–1, 3–6).

Our economic analysis did not identify any disproportionate costs that are likely to result from the designation. Consequently, the Secretary is not exerting her discretion to exclude any areas from this designation of critical habitat for *Arctostaphylos franciscana* based on economic impacts.

A copy of the FEA with supporting documents may be obtained by contacting the Sacramento Fish and Wildlife Office (see **ADDRESSES**) or by downloading from the Internet at <http://www.regulations.gov> under Docket No. FWS–R8–ES–2012–0067.

#### *Exclusions Based on National Security Impacts*

Under section 4(b)(2) of the Act, we consider the impact on national security

of specifying any particular area as critical habitat. In preparing this final rule, we have determined that the lands within the designation of critical habitat for *Arctostaphylos franciscana* are not owned or managed by the Department of Defense or Department of Homeland Security, and, therefore, we anticipate no impact on national security. Consequently, the Secretary is not exerting her discretion to exclude any areas from this final designation based on impacts on national security.

#### *Exclusions Based on Other Relevant Impacts*

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors including whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

We reviewed the Presidio Trust Management Plan and the Vegetation Management Plan (Presidio Trust 2002, entire; GGNRA and Presidio Trust 2002, entire). Neither of these documents included *Arctostaphylos franciscana* as a managed species or management actions for serpentine chaparral. We also reviewed the conservation plan for *A. franciscana* (Chasse *et al.* 2009, entire). This document provides information on the transplantation of the mother plant and propagation of cuttings, but it did not provide information on the physical features or the protection of habitat. The memorandum of agreement mentions that the agencies agree to collaborate on and implement the terms of the conservation plan and any necessary adaptive management changes to the conservation plan as the primary mechanism to promote the survival of *A. franciscana* (Caltrans *et al.* 2009, entire).

In preparing this final rule, we also examined the Presidio Environmental Remediation Program (Presidio Trust 2012); the Presidio Trails and Bikeways Master Plan (NPS and Presidio Trust 2003, entire); the Final Environmental Impact Statement/Fire Management Plan Golden Gate National Recreation Area (GGNRA 2006, entire); and the Significant Natural Resource Areas Management Plan Environmental

Impact Report (SNRAMP) (SFRPD 2006; San Francisco Planning Department 2011). We do not think they are appropriate for a basis for exclusion for the following reasons:

(1) The Presidio Trust Environmental Remediation Program cleans up waste sites from when the Presidio of San Francisco was a U.S. Army post. The environmental documents do not include *Arctostaphylos franciscana* (Presidio Trust 2012).

(2) The Presidio Trails and Bikeways Master Plan (NPS and Presidio Trust 2003) does not include *Arctostaphylos franciscana* as a managed species. It also does not provide for the conservation of the species.

(3) The Final Environmental Impact Statement/Fire Management Plan Golden Gate National Recreation Area (GGNRA 2006) does not include *Arctostaphylos franciscana* as a managed species. It also does not provide site-specificity for the conservation of the species.

(4) The SFRPD's Significant Natural Resource Areas Management Plan Environmental Impact Report has not been finalized. Although the SNRAMP (SFRPD 2006) discusses the reintroduction of *Arctostaphylos franciscana* to Mount Davidson, the Draft Environmental Impact Report (EIR) for the Significant Natural Resource Areas Management Plan Project does not include *Arctostaphylos franciscana* as a managed species (San Francisco Planning Department 2011).

We have determined that there are currently no habitat conservation plans for *Arctostaphylos franciscana* and the final designation does not include any tribal lands or trust resources. We anticipate no impact on tribal lands, partnerships, or HCPs from this critical habitat designation. As noted in the response to comments by the Presidio Trust, GGNRA, and SFRPD, we do not expect critical habitat designation to negatively affect management of Presidio lands for other listed species, nor do we expect designation to negatively impact management of SFRPD lands under the SNAMP. Accordingly, the Secretary is not exercising her discretion to exclude any areas from this final designation based on other relevant impacts.

#### **Required Determinations**

##### *Regulatory Planning and Review (Executive Orders 12866 and 13563)*

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) will review all significant rules. The Office of Information and

Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the Nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

*Regulatory Flexibility Act (5 U.S.C. 601 et seq.)*

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C. 801 *et seq.*), whenever an agency must publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. In this final rule, we are certifying that the critical habitat designation for *Arctostaphylos franciscana* will not have a significant economic impact on a substantial number of small entities. The following discussion explains our rationale.

According to the Small Business Administration, small entities include small organizations, such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; as well as small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500

employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts on these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this rule, as well as the types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small business firm's business operations.

Importantly, the incremental impacts of a rule must be *both* significant and substantial to prevent certification of the rule under the RFA and to require the preparation of an initial regulatory flexibility analysis. If a substantial number of small entities are affected by the critical habitat designation, but the per-entity economic impact is not significant, the Service may certify. Likewise, if the per-entity economic impact is likely to be significant, but the number of affected entities is not substantial, the Service may also certify.

In our final economic analysis of the critical habitat designation, we evaluated the potential economic effects on small business entities resulting from conservation actions related to the designation of critical habitat for *Arctostaphylos franciscana*. The analysis is based on the estimated impacts associated with the rulemaking as described in chapters 3 and 4 of the FEA and evaluates the potential for economic impacts related to: (1) NPS and Presidio Trust management and habitat restoration activities; (2) NPS and Presidio Trust soil remediation activities; (3) road maintenance and construction activities; (4) broadcast facility maintenance and construction activities; and (5) other activities, such as SFRPD trail maintenance and species reintroduction. The Presidio Trust, National Park Service, and the SFRPD are not small businesses. The Presidio Trust and the National Park Service are required to consult with us for impacts to critical habitat associated with management and habitat restoration activities; NPS and Presidio Trust soil remediation activities; road maintenance and construction activities; broadcast facility maintenance and construction activities; and reintroduction activities. Because there is no Federal nexus associated with SFRPD-managed lands, SFRPD is not

required to consult with our office for impacts to critical habitat associated with their operations, provided they are not receiving Federal funds or requiring Federal permits. Administrative costs of consultations on NPS and Presidio Trust management and habitat restoration activities, and soil remediation, are expected to be borne by us, the NPS, and the Presidio Trust. Therefore, we expect no incremental impacts to small entities.

Because the Service, Presidio Trust, National Park Service, and the SFRPD are the only entities with expected direct compliance costs and are not considered small entities, this rule will not result in a significant impact on a substantial number of small entities.

The Service's current understanding of recent case law is that Federal agencies are only required to evaluate the potential impacts of rulemaking on those entities directly regulated by the rulemaking; therefore, they are not required to evaluate the potential impacts to those entities not directly regulated. The designation of critical habitat for an endangered or threatened species only has a regulatory effect where a Federal action agency is involved in a particular action that may affect the designated critical habitat. Under these circumstances, only the Federal action agency is directly regulated by the designation, and, therefore, consistent with the Service's current interpretation of RFA and recent case law, the Service may limit its evaluation of the potential impacts to those identified for Federal action agencies. Under this interpretation, there is no requirement under the RFA to evaluate the potential impacts to entities not directly regulated, such as small businesses. However, Executive Orders 12866 and 13563 direct Federal agencies to assess costs and benefits of available regulatory alternatives in quantitative (to the extent feasible) and qualitative terms. Consequently, it is the current practice of the Service to assess to the extent practicable these potential impacts if sufficient data are available, whether or not this analysis is believed by the Service to be strictly required by the RFA. In other words, while the effects analysis required under the RFA is limited to entities directly regulated by the rulemaking, the effects analysis under the Act, consistent with the Executive Orders' regulatory analysis requirements, can take into consideration impacts to both directly and indirectly impacted entities, where practicable and reasonable.

Designation of critical habitat only affects activities authorized, funded, or carried out by Federal agencies. Some



kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies are required to consult with us under section 7 of the Act on activities they authorize, fund, or carry out that may affect critical habitat. The designation of critical habitat could trigger the requirement to reinstitute consultation for ongoing Federal activities and may result in an additional economic impact to small entities if the ongoing Federal activities were for small entities that required Federal authorization for some action (see *Application of the "Adverse Modification" Standard* section).

In summary, we considered whether this designation will result in a significant economic effect on a substantial number of small entities. Based on the above reasoning and currently available information, we concluded that this rule will not result in a significant economic impact on a substantial number of small entities. Therefore, we are certifying that the designation of critical habitat for *Arctostaphylos franciscana* will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

#### *Energy Supply, Distribution, or Use—Executive Order 13211*

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB has provided guidance for implementing this Executive Order that outlines nine outcomes that may constitute "a significant adverse effect" when compared to not taking the regulatory action under consideration. The economic analysis determined that *Arctostaphylos franciscana* critical habitat will have no effect on any aspect of energy supply or distribution. Therefore, the economic analysis finds that none of these criteria is relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with *A. franciscana* conservation activities within critical habitat are not expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

#### *Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), we make the following findings:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both "Federal intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or tribal governments" with two exceptions. It excludes "a condition of Federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding," and the State, local, or tribal governments "lack authority" to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. "Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program."

The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of

critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments because the designation of critical habitat imposes no obligations on State or local governments. The lands being designated are either under the jurisdiction of the National Park Service, the Presidio Trust, or the City and County of San Francisco. None of these government entities fits the definition of "small governmental jurisdiction." Therefore, a Small Government Agency Plan is not required.

#### *Takings—Executive Order 12630*

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for *Arctostaphylos franciscana* in a takings implications assessment. As discussed above, the designation of critical habitat affects only Federal actions. The designation of critical habitat for *A. franciscana* includes a total of approximately 10.8 ac (4.3 ha) of private lands. Although private parties that receive Federal funding, assistance, or require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Based on the best available information, the takings implications assessment concludes that this designation of critical habitat for *A. franciscana* does not pose significant takings implications.

#### *Federalism—Executive Order 13132*

In accordance with Executive Order 13132 (Federalism), this rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this critical habitat designation with appropriate State resource agencies in

California. We did not receive comments from State agencies.

From a Federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, the rule does not have substantial direct effects either on the States, or on the relationship between the national government and the States, or on the distribution of powers and responsibilities among the various levels of government. The designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical and biological features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist these local governments in long-range planning (because these local governments no longer have to wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) will be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

#### *Civil Justice Reform—Executive Order 12988*

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the applicable standards set forth in sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, the rule identifies

the elements of physical or biological features essential to the conservation of *Arctostaphylos franciscana*. The designated areas of critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

#### *Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

#### *National Environmental Policy Act (42 U.S.C. 4321 et seq.)*

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

#### *Government-to-Government Relationship With Tribes*

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206

of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes. We determined that there are no tribal lands in this critical habitat designation. Therefore, we have not been involved in any government-to-government communications with tribal entities regarding critical habitat for *Arctostaphylos franciscana*.

#### References Cited

A complete list of all references cited is available on the Internet at <http://www.regulations.gov>, at Docket No. FWS-R8-ES-2012-0067, and upon request from the Sacramento Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

#### Authors

The primary authors of this rulemaking are the staff members of the Sacramento Fish and Wildlife Office.

#### List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

#### Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

#### **PART 17—[AMENDED]**

■ 1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 1531–1544; 4201–4245, unless otherwise noted.

■ 2. Amend § 17.12(h) by revising the entry for “*Arctostaphylos franciscana*” under FLOWERING PLANTS in the List of Endangered and Threatened Plants to read as follows:

#### **§ 17.12 Endangered and threatened plants.**

\* \* \* \* \*

(h) \* \* \*

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
*	*	*	*	*	*		*
<i>Arctostaphylos franciscana.</i>	Franciscan manzanita.	U.S.A. (CA) .....	Ericaceae .....	E	809	17.96(a)	NA
*	*	*	*	*	*		*

■ 3. Amend § 17.96(a) by adding the family Ericaceae and an entry for “*Arctostaphylos franciscana* (Franciscan manzanita)” in alphabetical order to read as follows:

**§ 17.96 Critical habitat—plants.**

(a) *Flowering plants.*

\* \* \* \* \*

Family Ericaceae: *Arctostaphylos franciscana* (Franciscan manzanita)

(1) Critical habitat units are depicted for San Francisco County, California, on the maps below.

(2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of *Arctostaphylos franciscana* consist of four components:

(i) Areas on or near bedrock outcrops often associated with ridges of serpentine or greenstone, mixed Franciscan rocks, or soils derived from these parent materials.

(ii) Areas having soils originating from parent materials identified in paragraph (2)(i) of this entry that are thin, have limited nutrient content or availability, or have large concentrations of heavy metals.

(iii) Areas within a vegetation community consisting of a mosaic of coastal scrub, serpentine maritime chaparral, or serpentine grassland as characterized as having a vegetation structure that is open, barren, or sparse with minimal overstory or understory of trees, shrubs, or plants, and that contain and exhibit a healthy fungal mycorrhizae component.

(iv) Areas that are influenced by summer fog, which limits daily and seasonal temperature ranges, provides moisture to limit drought stress, and increases humidity.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they

are located existing within the legal boundaries on January 21, 2014.

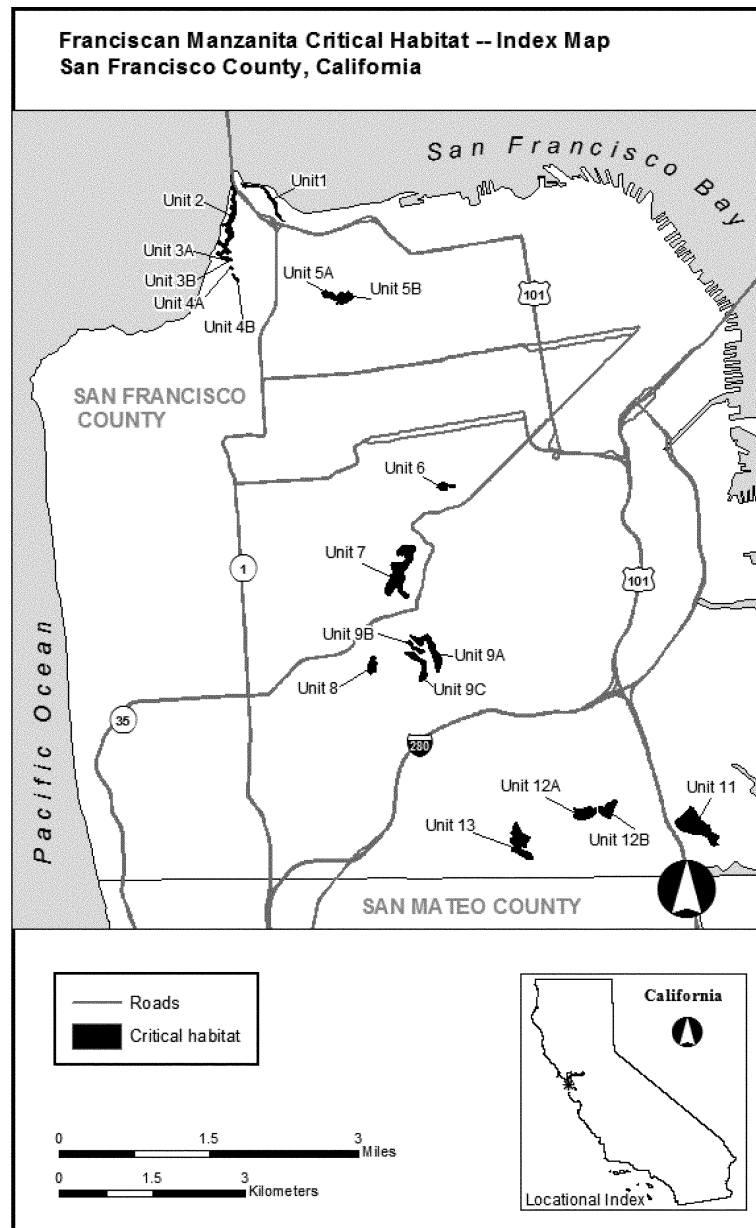
(4) *Critical habitat map units.* Data layers defining map units were created on a base of the Natural Resource Conservation Service National Agriculture Imagery Program (NAIP 2010), and critical habitat was then mapped using North American Datum (NAD) 83, Universal Transverse Mercator Zone 10N coordinates. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation.

(5) The coordinates for these maps are available on the Internet at <http://www.regulations.gov> at Docket No. FWS-R8-ES-2012-0067, at <http://www.fws.gov/sacramento/>, or at the Sacramento Fish and Wildlife Office. Field office location information may be obtained at the Service regional offices, the addresses of which are at 50 CFR 2.2.

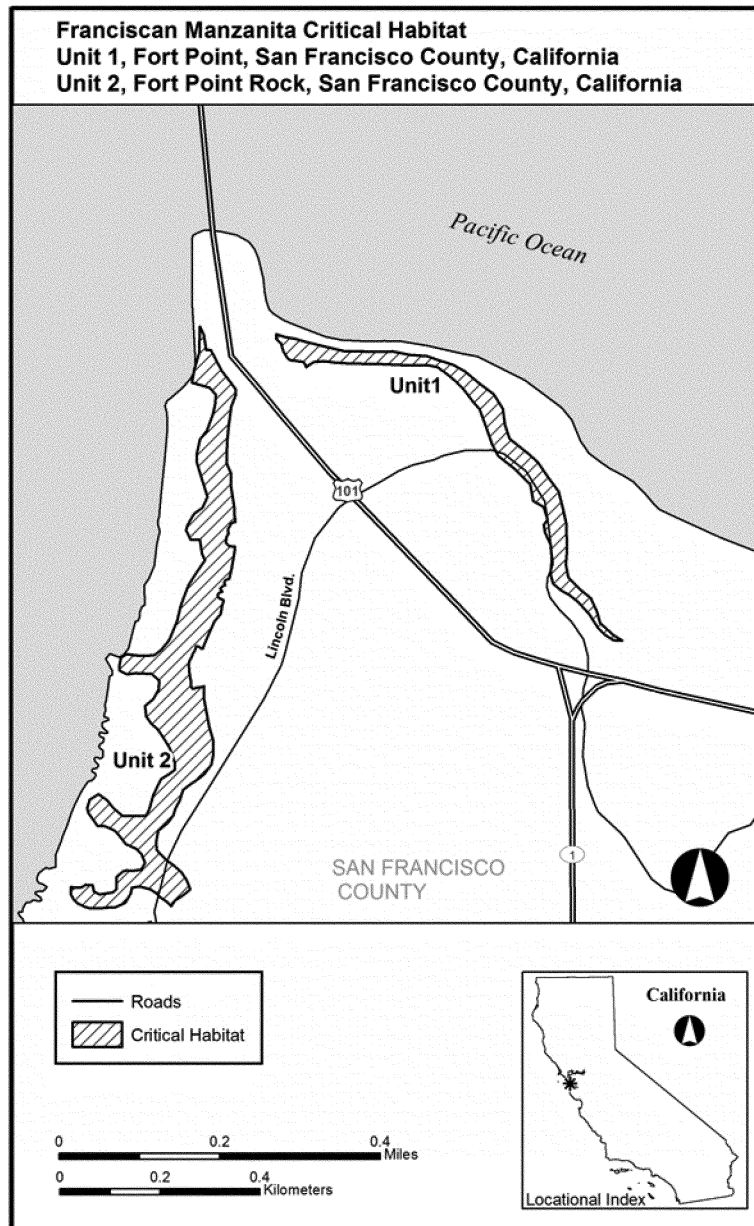
(6) The index map of critical habitat units for *Arctostaphylos franciscana*

(Franciscan manzanita) in San Francisco County, California, follows:

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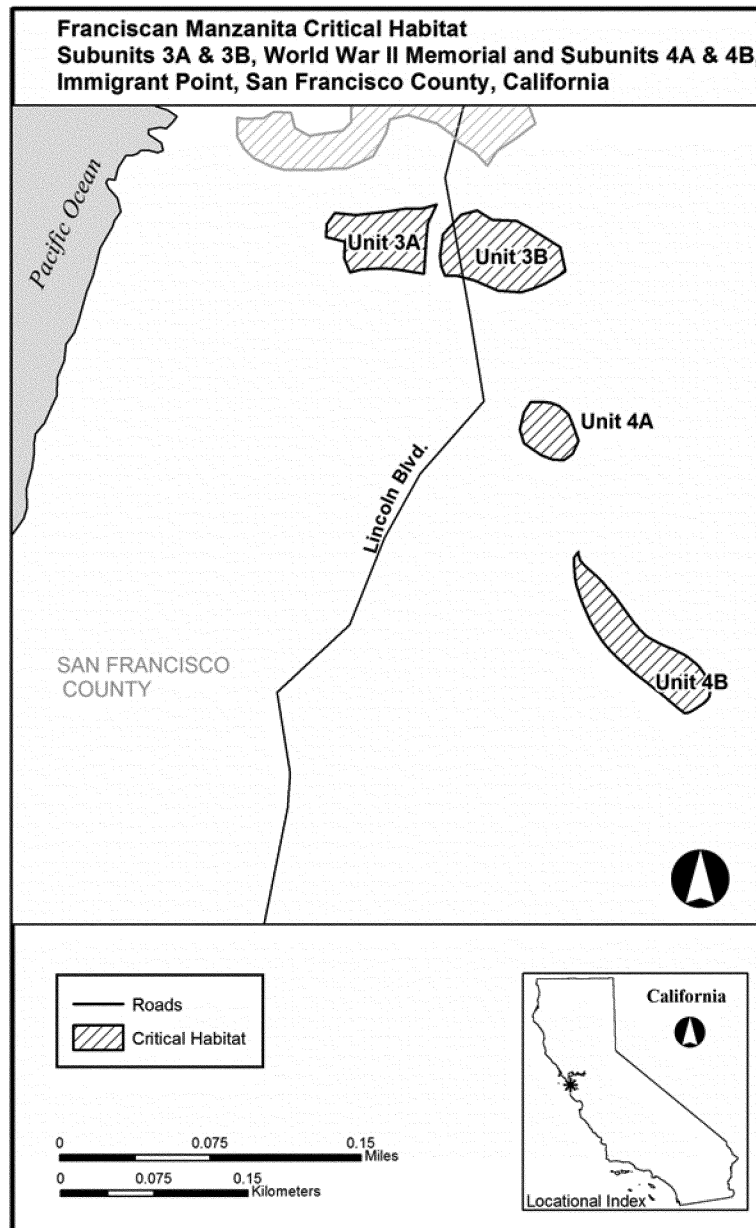
(7) Unit 1: Fort Point, San Francisco County, California. Map of Unit 1 and Unit 2 follows:



(8) Unit 2: Fort Point Rock, San Francisco County, California. Map of

Unit 2 is provided at paragraph (7) of this entry.

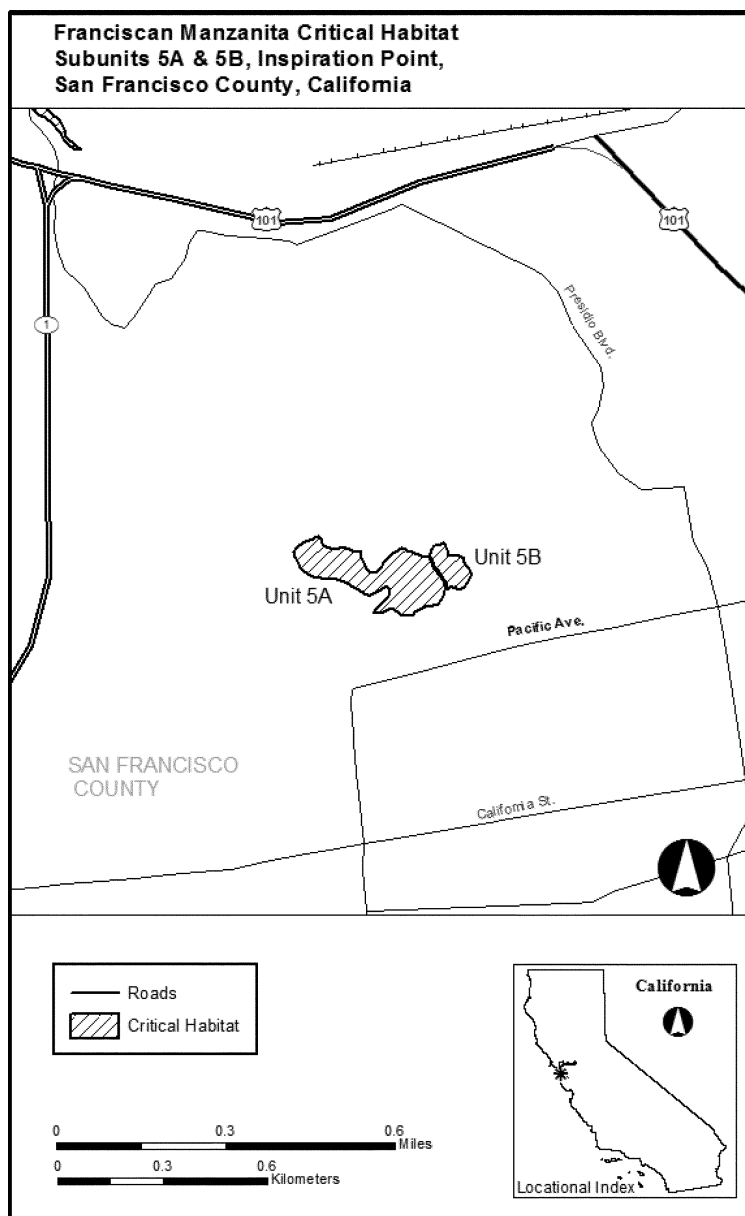
(9) Unit 3: World War II Memorial, San Francisco, California. Map of Unit 3 and Unit 4 follows:



(10) Unit 4: Immigrant Point, San Francisco County, California. Map of

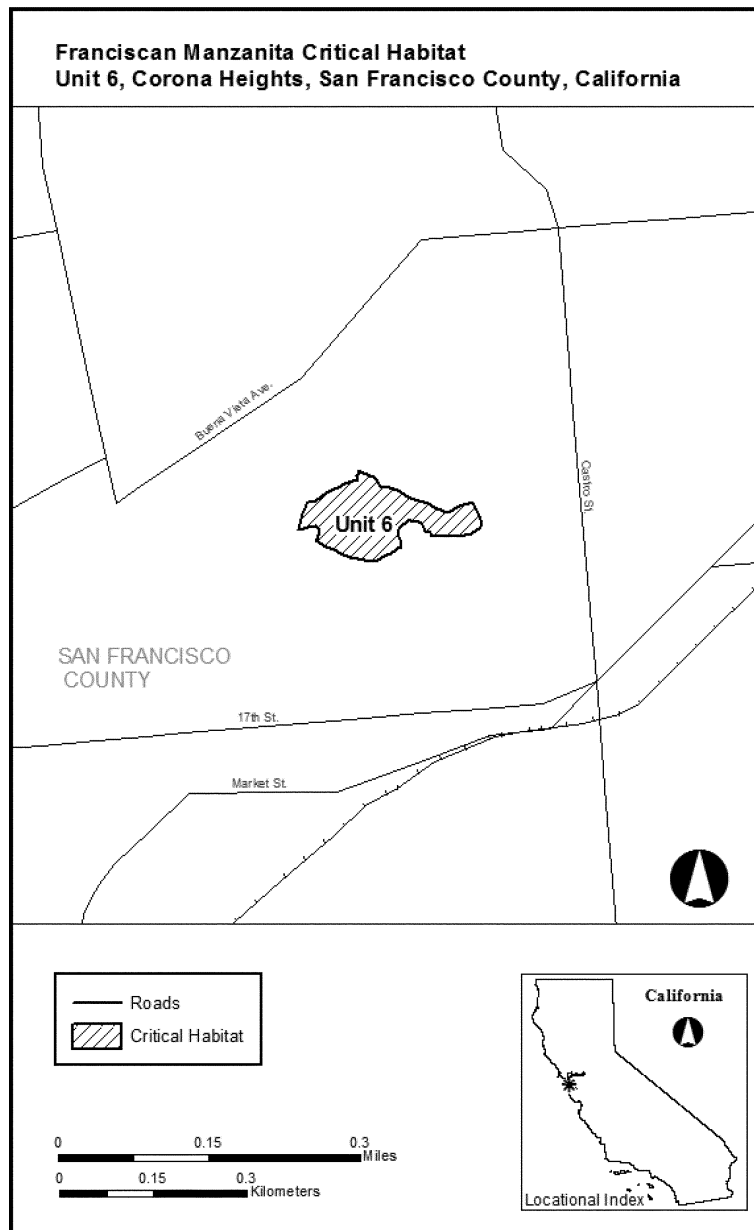
Unit 4 is provided at paragraph (9) of this entry.

(11) Unit 5: Inspiration Point, San Francisco, California. Map of Unit 5 follows:

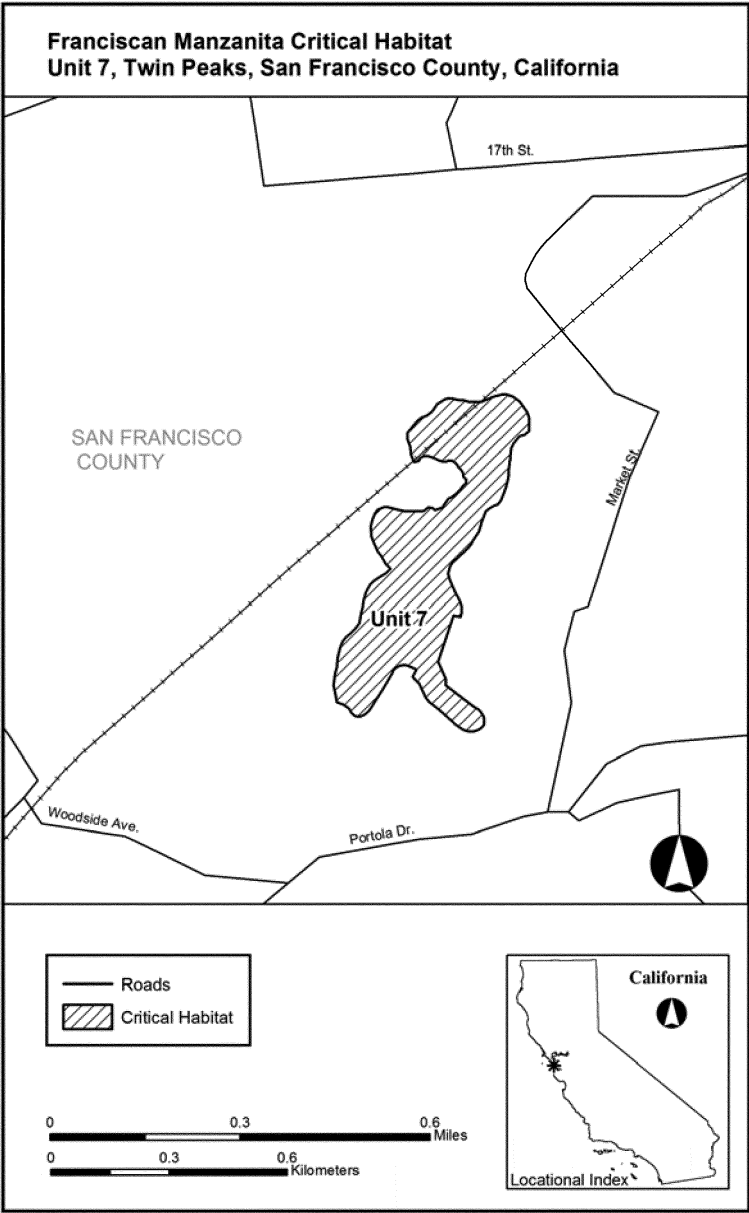




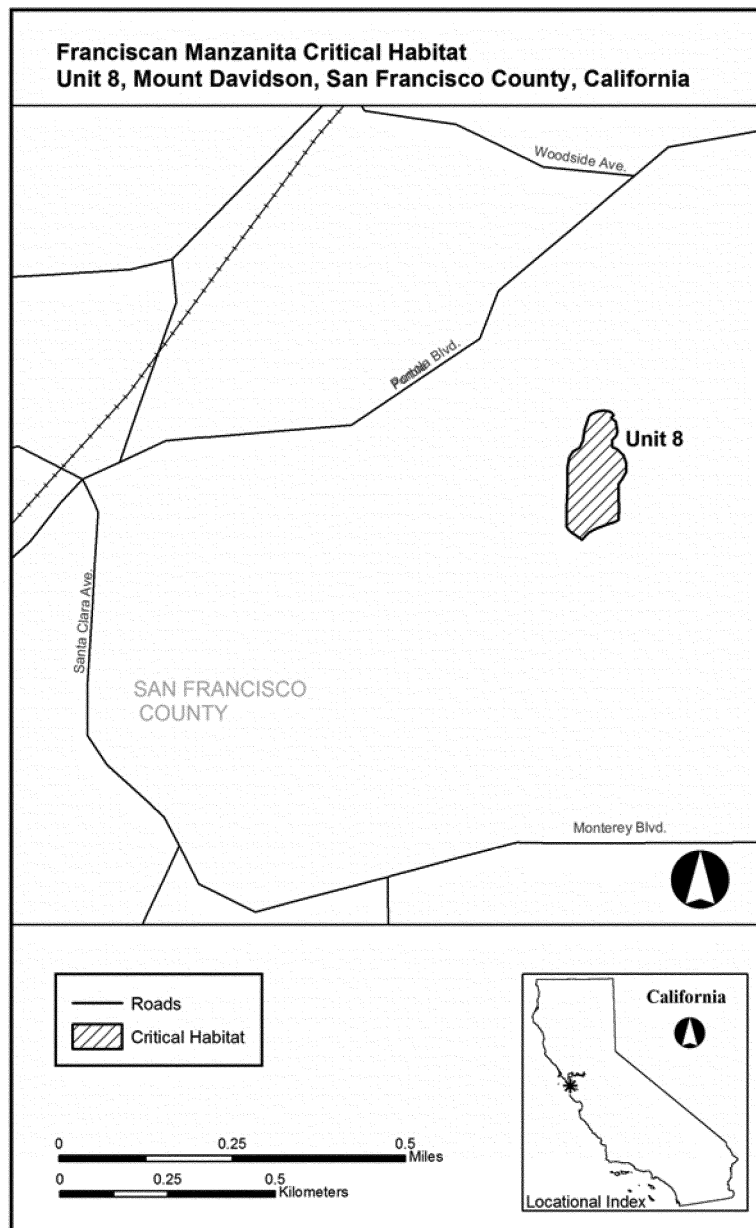
(12) Unit 6: Corona Heights, San Francisco County, California. Map of Unit 6 follows:



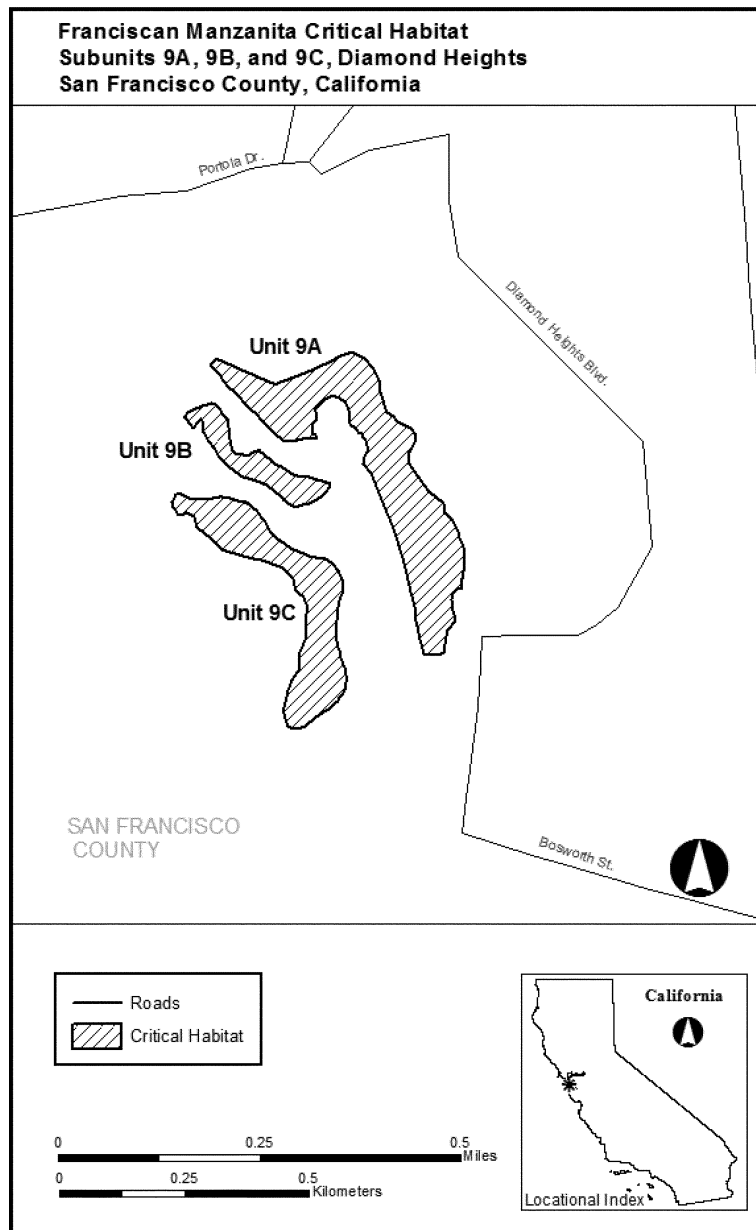
(13) Unit 7: Twin Peaks, San Francisco, California. Map of Unit 7 follows:



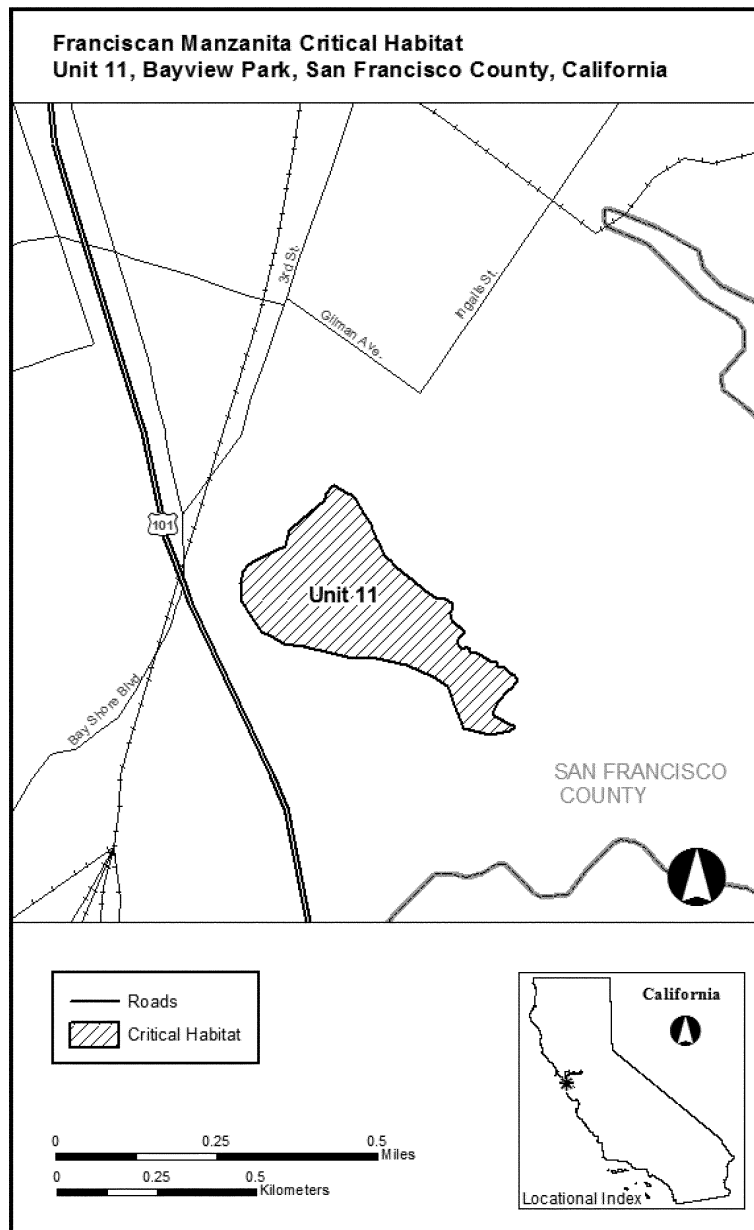
(14) Unit 8: Mount Davidson, San Francisco County, California. Map of Unit 8 follows:



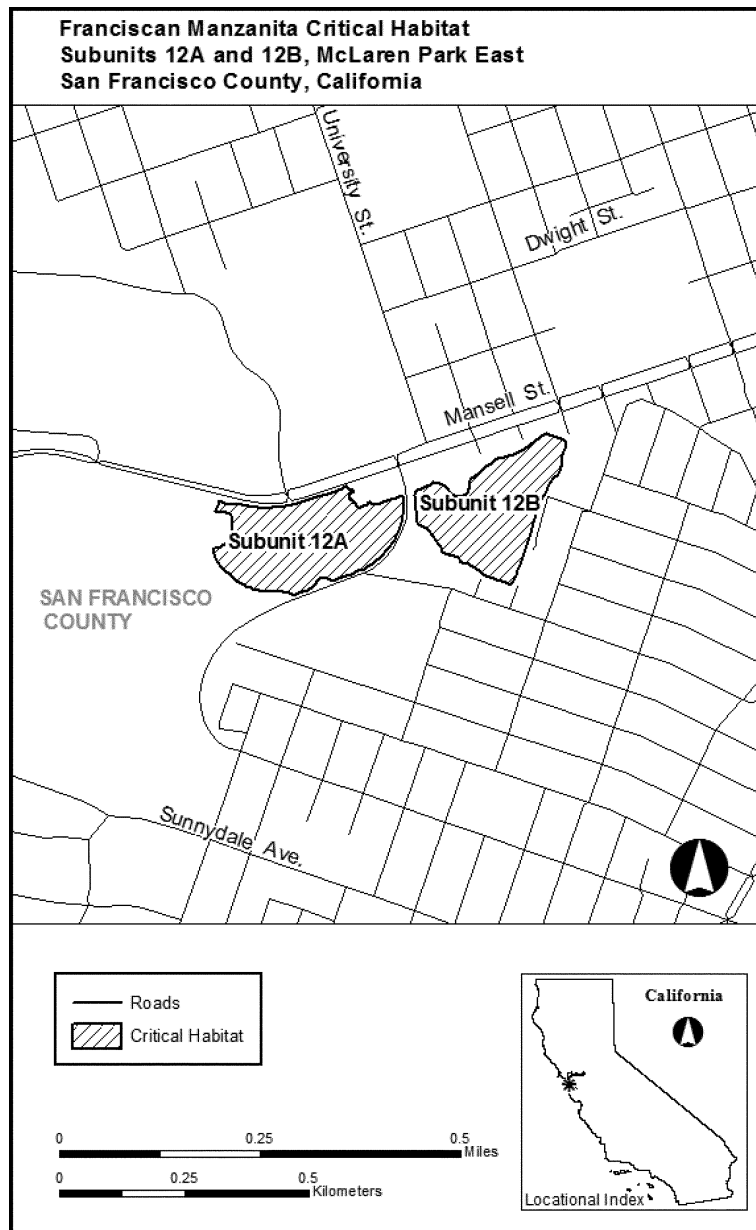
(15) Unit 9: Diamond Heights, San Francisco, California. Map of Unit 9 follows:



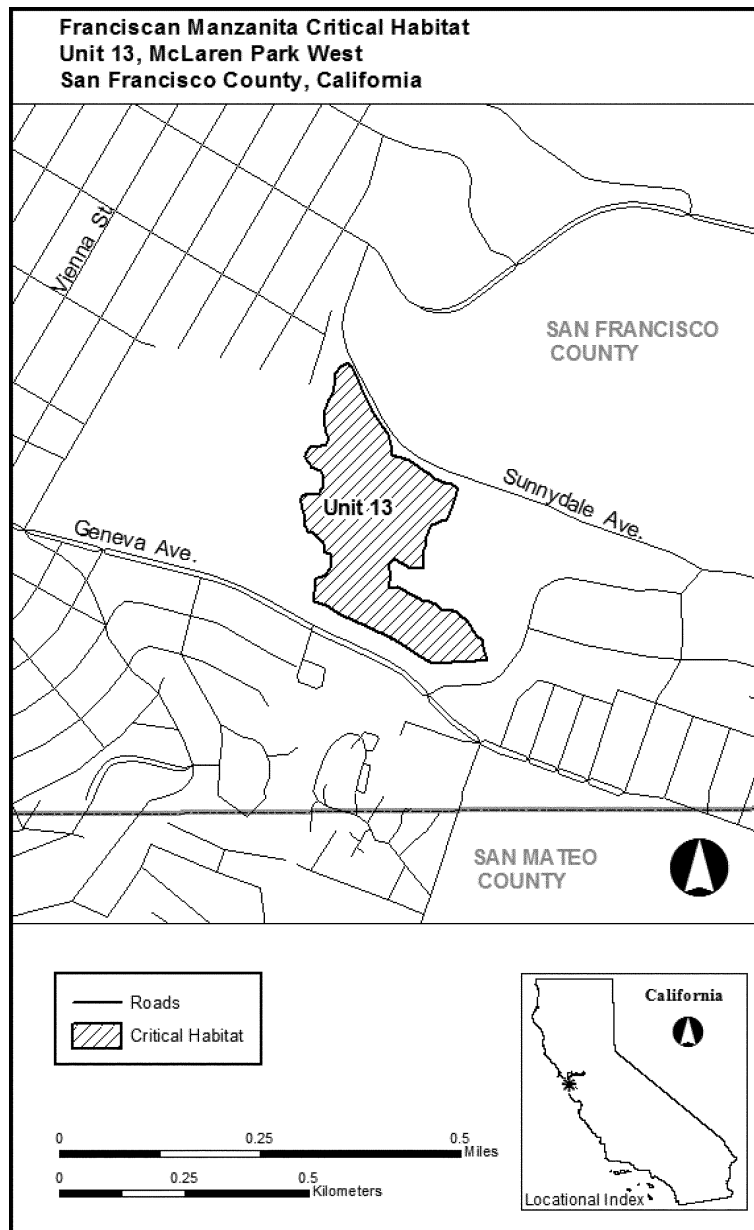
(16) Unit 11: Bayview Park, San Francisco County, California. Map of Unit 11 follows:



(17) Unit 12: McLaren Park East, San Francisco County, California. Map of Unit 12 follows:



(18) Unit 13: McLaren Park West, San Francisco County, California. Map of Unit 13 follows:



\* \* \* \* \*

Dated: December 12, 2013.

**Rachel Jacobsen,**

*Principal Deputy Assistant Secretary for Fish  
and Wildlife and Parks.*

[FR Doc. 2013-30165 Filed 12-19-13; 8:45 am]

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