Federal Register

Thursday,
October 7, 2010

Part II

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for *Navarretia fossalis* (Spreading Navarretia); Final Rule

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R8–ES–2009–0038]
[MO 92210-0-0009]

RIN 1018–AW22

Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for *Navarretia fossalis* (Spreading Navarretia)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate final revised critical habitat for *Navarretia fossalis* (spreading navarretia) under the Endangered Species Act of 1973, as amended. In total, approximately 6,720 acres (ac) (2,720 hectares (ha)) of habitat in Los Angeles, Riverside, and San Diego Counties, California, fall within the boundaries of the critical habitat designation. This final rule constitutes an overall increase of approximately 6,068 ac (2,456 ha) from the 2005 critical habitat designation for *N. fossalis*.

DATES: This rule becomes effective on November 8, 2010.

ADDRESSES: This final rule and the associated economic analysis are available on the Internet at *http://www.regulations.gov* and *http://www.fws.gov/carlsbad/*. 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, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Suite 101, Carlsbad, CA 92011; telephone 760–431–9440; facsimile 760–431–5901.

FOR FURTHER INFORMATION CONTACT: Jim Bartel, Field Supervisor, U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Suite 101, Carlsbad, CA 92011 (telephone 760–431–9440; facsimile 760–431–5901). If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Background

It is our intent to discuss only those topics directly relevant to the development of the revised designation of critical habitat for *Navarretia fossalis* under the Endangered Species Act of 1973 as amended (16 U.S.C. 1531 *et seq.*) (Act), in this final rule. For more information on the taxonomy, biology, and ecology of *N. fossalis*, refer to the final listing rule published in the **Federal Register** (FR) on October 13, 1998 (63 FR 54975), the final designation of critical habitat for *N. fossalis* published in the **Federal Register** on October 18, 2005 (70 FR 60658), the proposed revised designation of critical habitat published in the **Federal Register** on June 10, 2009 (74 FR 27588), and the document announcing the availability of the draft economic analysis (DEA) published in the **Federal Register** on April 15, 2010 (75 FR 19575). Additionally, information on this species can be found in the Recovery Plan for the Vernal Pools of Southern California (Recovery Plan) finalized on September 3, 1998 (Service 1998).

New Information on Subspecies' Description, Life History, Ecology, Habitat, and Range

We did not receive any new information pertaining to the description, life history, or ecology of *Navarretia fossalis* following the 2009 proposed rule to revise critical habitat (74 FR 27588; June 10, 2009). However, the following paragraphs discuss new information that we received regarding the species' habitat, geographic range and status, and the areas needed for *N. fossalis* conservation.

Habitat

Navarretia fossalis habitat was discussed in detail in the proposed revised critical habitat rule (74 FR 27588; June 10, 2009). One commenter provided information during the first public comment period on the proposed rule, noting several habitat characteristics they felt we should have discussed (see Comment 15 below); therefore, we are providing additional discussion and clarification here. *Navarretia fossalis* grows in vernal pool habitat, seasonally flooded alkali vernal plain habitat (a habitat that includes alkali playa, alkali scrub, alkali vernal pool, and alkali annual grassland communities), and irrigation ditches and detention basins (Bramlet 1993a, pp. 10, 14, 21–23; Ferren and Fiedler 1993, pp. 126–127; Spencer 1997, pp. 8, 13). Within alkali annual grasslands, this species is restricted to small vernal pools or other depressions (Bramlet 2009, p. 3). Researchers have also described "riverine pools" where *N. fossalis* occurs as having unique floristic elements, such as *Trichocoronis wrightii* var. *wrightii* (limestone bugheal or Wright's trichocoronis); *N. fossalis* and *T. wrightii* are only known to co-occur in the San Jacinto River (Bramlet 2009, p. 7). Suitability of hydrological conditions for the germination of this species varies on an annual basis; therefore, *N. fossalis* can be undetectable for a number of years and the number of plants varies depending on the timing, duration, and extent of ponding (Bramlet 2009, p. 3). For more habitat information, please see the **Habitat** section in the proposed revised critical habitat designation published in the **Federal Register** on June 10, 2009 (74 FR 27588).

Areas Needed for Conservation: Core and Satellite Habitat Areas

In the proposed revised critical habitat rule (74 FR 27588; June 10, 2009), we discussed the areas that represent core habitat areas and satellite habitat areas for *Navarretia fossalis*. During the first public comment period, one peer reviewer expressed concern regarding our use of the word "core" and the biological connotation of such terminology. The terms "core habitat area" and "satellite habitat area" are descriptive terms defined for the purpose of this rulemaking and are not intended to be synonymous with similar terms used in other documents, or to describe a population distribution. We defined these terms in the proposed revised critical habitat designation published in the **Federal Register** on June 10, 2009 (74 FR 27588). Core habitat is defined as areas that contain the highest concentrations of *N. fossalis* and the largest contiguous blocks of habitat for this species. Satellite areas are defined as habitat areas that support occurrences that are smaller than those supported by the "core habitat areas," but provide the means to significantly contribute to the recovery of *N. fossalis* (for further discussion of this issue see Comment 4 in the **Summary of Comments and Recommendations** section and our response). For more information on "core habitat area" and "satellite habitat area," please see the **Areas Needed for Conservation: Core and Satellite Habitat Areas** section in the proposed revised critical habitat designation published in the **Federal Register** on June 10, 2009 (74 FR 27588).

Previous Federal Actions

On October 18, 2005 (70 FR 60658), we published our final designation of critical habitat for *Navarretia fossalis*. On December 19, 2007, the Center for Biological Diversity filed a complaint in the U.S. District Court for the Southern District of California challenging our

designation of critical habitat for *N. fossalis* and *Brodiaea filifolia* (*Center for Biological Diversity* v. *United States Fish and Wildlife Service et al.,* Case No. 07–CV–02379–W–NLS). This lawsuit challenged the validity of the information and reasoning we used to exclude areas from the 2005 critical habitat designation for *N. fossalis*. On July 25, 2008, we reached a settlement agreement in which we agreed to submit a proposed revised critical habitat designation for *N. fossalis* to the **Federal Register** for publication by May 29, 2009, and a final revised critical habitat designation for publication by May 28, 2010. By order dated January 21, 2010, the district court approved a modification to the settlement agreement that extends to September 30, 2010, the deadline for submission of a final revised critical habitat designation to the **Federal Register**. The proposed revised critical habitat designation published in the **Federal Register** on June 10, 2009 (74 FR 27588).

Summary of Changes From the Proposed Revised Rule and the Previous Critical Habitat Designation

The areas designated as critical habitat in this final rule constitute a revision of the critical habitat for *Navarretia fossalis* we designated on October 18, 2005 (70 FR 60658). For this revised rulemaking process we:

(1) Refined the primary constituent elements (PCEs) to more accurately define the physical and biological features that are essential to the conservation of *N. fossalis*;

(2) Revised criteria to more accurately identify critical habitat;

(3) Improved mapping methodology to more accurately define critical habitat boundaries and better represent areas that contain PCEs;

(4) Evaluated areas considered for exclusion from critical habitat designation under section 4(b)(2) of the Act, including identifying whether or not areas are conserved and managed for the benefit of *N. fossalis*;

(5) Reanalyzed the economic impacts to identify baseline and incremental costs associated with critical habitat designation; and

(6) Added, subtracted, and revised areas that do or do not meet the definition of critical habitat. Table 1 provides an overview of the differences between critical habitat rules for *N. fossalis* at the unit level.

TABLE 1. CHANGES BETWEEN THE OCTOBER 18, 2005, CRITICAL HABITAT DESIGNATION; THE JUNE 10, 2009, PROPOSED CRITICAL HABITAT DESIGNATION; THE APRIL 15, 2010, CHANGES TO THE JUNE 10, 2009 PROPOSAL (AVAILABILITY OF THE DEA); AND THIS REVISED CRITICAL HABITAT DESIGNATION.

Critical habitat unit in this final rule	County	October 2005 critical habitat designation	June 2009 proposed revised critical habitat designation	April 2010 changes to proposed revised critical habitat designation	September 2010 revised critical habitat designation
Unit 1: Los Angeles Basin-Orange Management Area	Los Angeles	326 ac (132 ha)	161 ac (65 ha)	176 ac (71 ha)	176 ac (71 ha)
Unit 2: San Diego: Northern Coastal Mesa Management Area	San Diego	22 ac (9 ha)	9 ac (4 ha)	9 ac (4 ha)	9 ac (4 ha)
Unit 3: San Diego: Central Coastal Mesa Management Area	San Diego	0 ac (0 ha)	110 ac (45 ha)	108 ac (44 ha)	103 ac (42 ha)
Unit 4: San Diego: Inland Management Area	San Diego	159 ac (64 ha)	206 ac (83 ha)	206 ac (83 ha)	206 ac (83 ha)
Unit 5: San Diego: Southern Coastal Mesa Management Area	San Diego	145 ac (59 ha)	711 ac (288 ha)	753 ac (305 ha)	749 ac (303 ha)
Unit 6: Riverside Management Area	Riverside	0 ac (0 ha)	5,675 ac (2,297 ha)	6,356 ac (2,572 ha)	5,477 ac (2,217 ha)
Totals*		652 ac (264 ha)	6,872 ac (2,781 ha)	7,608 ac (3,079 ha)	6,720 ac (2,720 ha)

*Values in this table may not sum due to rounding.

In 2005, we designated approximately 652 ac (264 ha) as critical habitat for *Navarretia fossalis* in 4 units with 10 subunits (70 FR 60658; October 18, 2005). In our 2009 proposed revised critical habitat, we proposed approximately 6,872 ac (2,781 ha) as critical habitat in 6 units with 22 subunits (74 FR 27588; June 10, 2009). In response to information received as public comments on our 2009 proposed revised critical habitat, we changed the 2009 proposed revised rule to propose approximately 7,608 ac (3,079 ha) as critical habitat in 6 units with 23 subunits (75 FR 19575; April 15, 2010). In this revised critical habitat rule, we are designating approximately 6,720 ac (2,720 ha) as critical habitat in 6 units with 19 subunits, reflecting exclusion of approximately 871 ac (353 ha) in all or portions of 2 units (3 subunits) based on consideration of relevant impacts under section 4(b)(2) of the Act. Lands that contain the physical and biological features essential to the conservation of *N. fossalis* on Marine Corps Air Station

(MCAS) Miramar and Marine Corps Base (MCB) Camp Pendleton are exempt from this critical habitat designation based on section 4(a)(3)(B) of the Act. All lands designated as critical habitat in this revised rule were included in the 2009 proposed revised rule (74 FR 27588) or the document that made available the DEA (75 FR 19575). Table 2 provides detailed information about differences between the 2005 final critical habitat designation, the 2009 proposed revised critical habitat designation, and this revised critical habitat designation for *N. fossalis*. The changes between the 2005 final designation, the 2009 proposed revisions, and this final designation are described below.

TABLE 2. A COMPARISON OF THE AREAS IDENTIFIED AS CONTAINING THE PHYSICAL AND BIOLOGICAL FEATURES ESSENTIAL TO THE CONSERVATION OF *Navarretia fossalis* IN THE 2005 CRITICAL HABITAT DESIGNATION, THE 2009 PROPOSED REVISED CRITICAL HABITAT DESIGNATION, AND THIS REVISED CRITICAL HABITAT DESIGNATION.

Location*	2005 Critical Habitat Designation		2009 Proposed Revised Critical Habitat		2010 Revised Critical Habitat Designation	
	Subunit	Area Containing Essential Features	Subunit	Area Containing Essential Features	Subunit	Area Containing Essential Features
Unit 1: Los Angeles Basin-Orange Management Area						
Cruzan Mesa	1A	294 ac (119 ha)	1A	129 ac (52 ha)	1A	156 ac (63 ha)
Plum Canyon	1B	32 ac (13 ha)	1B	32 ac (13 ha)	1B	20 ac (8 ha)
Unit 2: San Diego: Northern Coastal Mesa Management Area						
MCB Camp Pendleton	4(a)(3) exemption	67 ac (27 ha)	4(a)(3) exemption	145 ac (59 ha)	4(a)(3) exemption	145 ac (59 ha)
Poinsettia Lane Commuter Station	2; partially excluded under section 4(b)(2)	22 ac (9 ha)	2	9 ac (4 ha)	2	9 ac (4 ha)
Unit 3: San Diego: Central Coastal Mesa Management Area						
Santa Fe Valley	Proposed as Unit 3, but determined not essential	—	Not proposed	—	Not proposed	—
Santa Fe Valley (Crosby Estates)	—	—	3A	5 ac (2 ha)	Excluded under section 4(b)(2)	5 ac (2 ha)
Carroll Canyon	—	—	3B	20 ac (8 ha)	3B	18 ac (7 ha)
Nobel Drive	—	—	3C	37 ac (15 ha)	3C	37 ac (15 ha)
MCAS Miramar	4(a)(3) exemption	61 ac (25 ha)	4(a)(3) exemption	69 ac (28 ha)	4(a)(3) exemption	69 ac (28 ha)
Montgomery Field	Excluded under section 4(b)(2)	38 ac (16 ha)	3D	48 ac (20 ha)	3D	48 ac (20 ha)
Unit 4: San Diego: Inland Management Area						
San Marcos (Upham)	4C1	34 ac (14 ha)	4C1	34 ac (14 ha)	4C1	34 ac (14 ha)
San Marcos (Universal Boot)	4C2	32 ac (13 ha)	4C2	32 ac (13 ha)	4C2	32 ac (13 ha)
San Marcos (Bent Avenue)	4D	7 ac (3 ha)	4D	5 ac (2 ha)	4D	5 ac (2 ha)
Ramona	4E	86 ac (35 ha)	4E	135 ac (55 ha)	4E	135 ac (55 ha)
Unit 5: San Diego: Southern Coastal Mesa Management Area						

TABLE 2. A COMPARISON OF THE AREAS IDENTIFIED AS CONTAINING THE PHYSICAL AND BIOLOGICAL FEATURES ESSENTIAL TO THE CONSERVATION OF *Navarretia fossalis* IN THE 2005 CRITICAL HABITAT DESIGNATION, THE 2009 PROPOSED REVISED CRITICAL HABITAT DESIGNATION, AND THIS REVISED CRITICAL HABITAT DESIGNATION.—Continued

Location*	2005 Critical Habitat Designation		2009 Proposed Revised Critical Habitat		2010 Revised Critical Habitat Designation	
	Subunit	Area Containing Essential Features	Subunit	Area Containing Essential Features	Subunit	Area Containing Essential Features
Sweetwater Vernal Pools (S1-3)	5A; partially excluded under section 4(b)(2)	89 ac (36 ha) Excluded 74 ac (30 ha)	5A	95 ac (38 ha)	5A	95 ac (38 ha)
Otay River Valley (K1 and K2)	Excluded under section 4(b)(2)	57 ac (23 ha)	Not proposed, determined not essential	—	Not proposed, determined not essential	—
Otay River Valley (M2)	5B and excluded under section 4(b)(2)	42 ac (17 ha) Excluded 67 ac (27 ha)	5B	24 ac (10 ha)	5B	24 ac (10 ha)
Otay Mesa (J26)	5C and excluded under section 4(b)(2)	14 ac (6 ha)	Not proposed, determined not essential	—	5C***	42 ac (17 ha)
Arnie's Point	Proposed as Subunit 5D, but determined not essential	—	Not proposed	—	Not proposed	—
Proctor Valley (R1-2)	—	—	5F	88 ac (36 ha)	5F	88 ac (36 ha)
Otay Lakes (K3-5)	—	—	5G	140 ac (57 ha)	5G	140 ac (57 ha)
Western Otay Mesa vernal pool complexes	Excluded under section 4(b)(2)	117 ac (47 ha)	5H	143 ac (58ha)	5H	143 ac (58ha)
Eastern Otay Mesa vernal pool complexes	Excluded under section 4(b)(2)	277 ac (112 ha)	5I	221 ac (89 ha)	5I	221 ac (89 ha)
Unit 6: Riverside Management Area						
San Jacinto River	Excluded under section 4(b)(2)	10,774 ac (4,360 ha)	6A	3,550 ac (1,437 ha)	6A***	4,312 ac (1,745 ha)
Salt Creek Seasonally Flooded Alkali Plain	Excluded under section 4(b)(2)	2,233 ac (904 ha)	6B	1,054 ac (427 ha)	6B	930 ac (376 ha)
Wickerd Road and Scott Road Pools	Excluded under section 4(b)(2)	275 ac (111 ha)	6C	205 ac (83 ha)	6C***	235 ac (95 ha)
Skunk Hollow	Excluded under section 4(b)(2)	306 ac (124 ha)	6D	158 ac (64 ha)	Excluded under section 4(b)(2)	158 ac (64 ha)
Mesa de Burro	Excluded under section 4(b)(2)	4,396 ac (1,779 ha)	6E	708 ac (287 ha)	Excluded under section 4(b)(2)	708 ac (287 ha)
Total Area Essential for the Conservation of *Navarretia fossalis***	—	19,399 ac (7,851 ha)	—	7,086 ac (2,868 ha)	—	7,804 ac (3,158 ha)

TABLE 2. A COMPARISON OF THE AREAS IDENTIFIED AS CONTAINING THE PHYSICAL AND BIOLOGICAL FEATURES ESSENTIAL TO THE CONSERVATION OF *Navarretia fossalis* IN THE 2005 CRITICAL HABITAT DESIGNATION, THE 2009 PROPOSED REVISED CRITICAL HABITAT DESIGNATION, AND THIS REVISED CRITICAL HABITAT DESIGNATION.—Continued

Location*	2005 Critical Habitat Designation		2009 Proposed Revised Critical Habitat		2010 Revised Critical Habitat Designation	
	Subunit	Area Containing Essential Features	Subunit	Area Containing Essential Features	Subunit	Area Containing Essential Features
Total Area Exempt Under Section 4(a)(3)**	—	128 ac (52 ha)	—	213 ac (86 ha)	—	213 ac (86 ha)
Total Area Excluded Under Section 4(b)(2)**	—	18,619 ac (7,535 ha)	—	0 ac (0 ha)	—	871 ac (353 ha)
Total Area Designated as Critical Habitat for *Navarretia fossalis***	—	652 ac (264 ha)	—	N/A	—	6,720 ac (2,720 ha)

*This table does not include all locations that are occupied by *Navarretia fossalis*. It includes only those locations that were designated as critical habitat in 2005 or proposed in 2009 or discussed in this critical habitat rule.
**Values in this table may not sum due to rounding.
***Acreage added in 75 FR 19575 (June 10, 2009) revision.

Summary of Changes From the 2005 Final Designation of Critical Habitat

In the 2005 final rule, we did not designate areas containing essential habitat features if those habitat features were already conserved and managed for the benefit of *Navarretia fossalis* because we concluded that the areas did not meet the second part of the definition of critical habitat under section 3(5)(a)(i) of the Act. We have reconsidered our approach in light of subsequent court decisions and have decided that areas containing essential habitat features that "may require" special management considerations or protection do meet the definition of critical habitat irrespective of whether the habitat features are currently receiving special management or protection. Current protection or management does not disqualify an area from meeting the definition of critical habitat, rather it is a relevant factor to consider under section 4(b)(2) of the Act when we weigh the benefits of including a particular area in critical habitat against the benefits of excluding the area. In this rule we identified essential areas that are conserved and managed for the benefit of the species, determined they meet the definition of critical habitat, and then analyzed whether the benefits of exclusion from critical habitat designation outweigh the benefits of including these areas under section 4(b)(2) of the Act.

This rule also uses a new economic analysis to identify and estimate the potential economic effects on small business entities resulting from implementation of conservation actions associated with the proposed revision of critical habitat. The analysis focuses on the estimated incremental impacts associated with critical habitat designation.

Of the 652 ac (264 ha) of land included in the 2005 final critical habitat rule, approximately 469 ac (190 ha) are included in this revised critical habitat designation. Some areas designated in 2005 are not designated in this final rule because we used a grid of 2.47–ac (1–ha) cells (100 m grid) to identify essential habitat in our GIS analysis in 2005. In this revised critical habitat, we identified essential habitat with heads-up digitizing at various scales using imagery of 1–meter resolution, resulting in a more precise identification.

Additionally, we are designating as critical habitat 6,251 ac (2,530 ha) of land identified as meeting the definition of critical habitat that were not designated in 2005. The primary reason revised designated critical habitat is greater than the 2005 designated area is that we included several areas that were excluded from the 2005 critical habitat designation under section 4(b)(2) of the Act. A summary of specific changes from the 2005 critical habitat designation is provided below. In addition to revisions to specific subunits, we also revised the PCEs, the criteria used to identify critical habitat, the economic impacts to include incremental impacts, and the mapping methodology for this revised critical habitat designation. For a detailed discussion of the changes between the 2005 critical habitat rule and the 2009 proposed revision, please see the **Summary of Changes From Previously Designated Critical Habitat** section in the proposed revised rule (74 FR 27588; June 10, 2009).

In this revised critical habitat designation for *Navarretia fossalis*, comparisons to the 2005 critical habitat designation are described below using three categories:

(1) Areas designated in 2005 and also designated in this rule,

(2) Areas designated in 2005 but not designated in this rule, and

(3) Areas not designated in 2005 that are designated in this rule.

(1) Areas designated in 2005 and also designated in this rule are found in Subunits 1A, 1B, 2, 4C1, 4C2, 4D, 4E, 5A, 5B, and 5C. We analyzed each of these areas and determined these areas are not conserved and managed for the benefit of *Navarretia fossalis* and the benefits of inclusion outweigh the benefits of exclusion.

(2) Areas designated in 2005 but not designated in this rule include land in Subunits 1A, 1B, 2, 4D, 5A, and 5B as described in the 2005 designation. The difference of these subunits between the previous rule and this final rule is mostly due to our discontinued use of a 100–m grid to map critical habitat,

which captured areas that we determined in this rule did not meet the definition of critical habitat. Additionally, the difference in Subunit 1B was due to more precise *Navarretia fossalis* habitat location data in the vicinity of Plum Canyon.

(3) Areas not designated in 2005 that are designated in this rule include areas within Subunits 1B, 3B, 3C, 3D, 4D, 4E, 5A, 5B, 5F, 5G, 5H, 5I, 6A, 6B, and 6C, and part of 5C. Some of these subunits meet the definition of critical habitat based on new information. Subunits 1B, 4D, 4E, and 5B include new areas due to mapping refinements made to better capture local watersheds. Subunits 3B, 3D, 5F, 5G, 5H, and 5I include vernal pool complexes that provide habitat for *Navarretia fossalis* that were not included in the 2005 final rule, but meet the definition of critical habitat for this species (see the 2009 proposed rule for details (74 FR 27588; June 10, 2009)). Other subunits have been designated based on our determination under section 4(b)(2) of the Act that the benefits of inclusion outweigh the benefits of exclusion of these areas because they are not currently conserved and managed for the benefit of *N. fossalis*. All or portions of Subunits 3D, 5A, 5B, 5H, 5I, 6A, and 6C are the same as areas that met the definition of critical habitat in 2005, but were excluded from the 2005 designation under section 4(b)(2) of the Act. The only areas excluded from critical habitat in the current rule under section 4(b)(2) of the Act are those that are conserved and managed for the benefit of *N. fossalis*, and where the exclusion would not result in extinction of the species (see the A**pplication of Section 4(b)(2) of the Act** section of this rule).

Summary of Changes From the 2009 Proposed Rule To Revise Critical Habitat

We evaluated lands considered for exclusion under section 4(b)(2) of the Act to determine if the benefits of exclusion outweigh the benefits of inclusion. We excluded 871 ac (353 ha) of lands under section 4(b)(2) of the Act that are conserved and managed for the benefit of *Navarretia fossalis* We excluded certain lands under two habitat conservation plans (HCPs), summarized below and discussed in detail in the **Exclusions** section.

(1) In the proposed revised rule, we considered for exclusion under section 4(b)(2) of the Act lands covered by the Carlsbad Habitat Management Plan (Carlsbad HMP) under the San Diego Multiple Habitat Conservation Program (MHCP). In this revised rule, we determined the benefits of inclusion outweigh the benefits of exclusion for all of the lands covered by the Carlsbad HMP because these lands are not both conserved and managed for the benefit of *Navarretia fossalis*. However, we recognize the efforts made by permittees of the Carlsbad HMP to assist in the conservation of *N. fossalis* and other listed species. We look forward to continuing to work with these partners to assure that long-term conservation and management is assured for *N. fossalis*. See the **Exclusions** section below for a summary evaluation of lands considered for exclusion under the Carlsbad HMP and our rationale for including these lands in this revised critical habitat designation.

(2) In the proposed revised rule, we considered lands proposed as critical habitat within the County of San Diego Subarea Plan under the San Diego Multiple Species Conservation Program (MSCP; County of San Diego Subarea Plan) for exclusion under section 4(b)(2) of the Act. In this revised rule, we determined the benefits of exclusion outweigh the benefits of inclusion for a portion (5 ac (2 ha) in Subunit 3A) of lands under the County of San Diego Subarea Plan that are both conserved and managed for the benefit of *Navarretia fossalis*, and determined exclusion of these lands will not result in extinction of the species. However, we determined the benefits of inclusion outweigh the benefits of exclusion for 81 ac (33 ha) of lands within the County of San Diego Subarea Plan. As a result, we excluded approximately 5 ac (2 ha) of these lands under section 4(b)(2) of the Act, and included approximately 81 ac (33 ha) within the revised critical habitat designation. For a complete discussion of the benefits of inclusion and exclusion for all lands within the County of San Diego Subarea Plan, see the **Application of Section 4(b)(2) of the Act** section below.

(3) In the proposed revised rule, we considered for exclusion under section 4(b)(2) of the Act lands owned by or under the jurisdiction of the permittees of the Western Riverside County Multiple Species Habitat Conservation Plan (Western Riverside County MSHCP). In this revised rule, we determined the benefits of exclusion outweigh the benefits of inclusion for 866 ac (351 ha) of the lands owned by or under the jurisdiction of the permittees of the Western Riverside County MSHCP that are conserved and managed (Subunits 6D and 6E), and determined exclusion of these lands will not result in extinction of the species. We determined the benefits of inclusion outweigh the benefits of exclusion for 5,477 ac (2,217 ha) of lands owned by or under the jurisdiction of the permittees of the Western Riverside County MSHCP. As a result, we excluded approximately 866 ac (351 ha) of these lands under section 4(b)(2) of the Act, and included approximately 5,477 ac (2,217 ha) within the revised critical habitat designation. For a complete discussion of the benefits of inclusion and exclusion for all lands within the Western Riverside County MSHCP, see the **Application of Section 4(b)(2) of the Act** section below.

Critical Habitat

Background

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

(i) 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

(I) essential to the conservation of the species and

(II) which may require special management considerations or protection; and

(ii) 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 the use of all methods and procedures that are necessary to bring any endangered or threatened species to the point at which the measures provided under 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, transplantation, and in the extraordinary case where population pressures within a given ecosystem cannot otherwise be relieved, regulated taking.

Critical habitat receives protection under section 7 of the Act through the prohibition against Federal agencies carrying out, funding, or authorizing the destruction or adverse modification of critical habitat. Section 7(a)(2) of the Act requires consultation on Federal actions that may affect 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 by non-Federal landowners. Where a landowner seeks or 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 in the event of a destruction or adverse modification finding, the Federal action agency's and the applicant's obligation is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

For inclusion in a critical habitat designation, the habitat within the geographical area occupied by the species at the time it was listed must contain the physical and biological features essential to the conservation of the species, and be included if those features may require special management considerations or protection. Critical habitat designations identify, to the extent known using the best scientific and commercial data available, habitat areas that provide essential life cycle needs of the species (areas on which are found the physical and biological features laid out in the appropriate quantity and spatial arrangement for the conservation of the species). Under the Act and regulations at 50 CFR 424.12, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed only when we determine that those areas are essential for the conservation of the species and that designation limited to the geographical area occupied at the time of listing 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 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, or other unpublished materials and expert opinion or personal knowledge.

Habitat is often dynamic, and species may move from one area to another over time. 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 also affect the duration and frequency of drought and these climatic changes may even more dramatic and intense (Graham 1997). Documentation of climate-related changes that have already occurred in California (Croke *et al.* 1998, pp. 2128, 2130; Brashears *et al.* 2005, p. 15144), and future drought predictions for California (such as Field *et al.* 1999, pp. 8–10; Lenihen *et al.* 2003, p. 1667; Hayhoe *et al.* 2004, p. 12422; Brashears *et al.* 2005, p. 15144; Seager *et al.* 2007, p. 1181) and North America (IPCC 2007, p. 9) indicate prolonged drought and other climate-related changes will continue in the foreseeable future.

We anticipate these changes could affect a number of native plants, including *Navarretia fossalis* occurrences and habitat. If the amount and timing of precipitation or the average temperature increases in southern California, the long term viability of *N. fossalis* may be affected in several ways, including the following: (1) Drier conditions may result in a lower germination rate and smaller population sizes; (2) a shift in the timing of annual rainfall may favor nonnative species that impact the quality of habitat for this species; or (3) drier conditions may result in increased fire frequency, making the ecosystems in which *N. fossalis* currently grows more vulnerable to the threats of subsequent erosion and nonnative plant invasion.

At this time, we are unable to identify the specific ways that climate change may impact *Navarretia fossalis*; therefore, we are unable to determine if any additional areas may be appropriate to include in this final critical habitat rule to address the effects of climate change. Additionally, 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 required for recovery of the species.

Areas that are important to the conservation of the species, but are outside the critical habitat designation, will continue to be subject to conservation actions we implement under section 7(a)(1) of the Act. Areas that support populations are also subject to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available scientific and commercial information at the time of the agency action. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. 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, HCPs, or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Physical and 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 and 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 historic, geographical, and ecological distributions of a species.

We consider the specific physical and biological features essential to the conservation of the species and laid out in the appropriate quantity and spatial arrangement for the conservation of the species. We derive those specific essential physical and biological features for *Navarretia fossalis* from the biological needs of this species as described in the **Critical Habitat** section of the proposed rule to designate critical habitat for *N. fossalis* published in the **Federal Register** on June 10, 2009 (74 FR 27588).

The area designated as final revised critical habitat consists of ephemeral wetland habitat for the reproduction and growth of *Navarretia fossalis*, intermixed wetland and upland habitats that comprise the local watershed to support ephemeral wetland habitat, and the topography and soils required for ponding during winter and spring months. The methods of dispersal and pollination for *N. fossalis* are not well understood; therefore, elements required for these processes may not be geographically captured by this revised critical habitat designation. Likewise, delineating larger watershed areas that support ephemeral wetland habitat may require hydrological data and modeling that are not available; therefore, areas beyond the local watershed are not included in this revised critical habitat designation. The physical and biological features essential to the conservation of *N. fossalis* are derived from studies of this species' habitat, ecology, and life history as described below, in the **Background** section of the proposed revised critical habitat designation published in the **Federal Register** on June 10, 2009 (74 FR 27588), the critical habitat designation published in the **Federal Register** on October 18, 2005 (70 FR 60658), and the final listing rule published in the **Federal Register** on October 13, 1998 (63 FR 54975).

Habitats That Are Representative of the Historical, Geographical, and Ecological Distribution of *Navarretia fossalis*

Navarretia fossalis is restricted to ephemeral wetlands in southern California and northwestern Baja California, Mexico (Moran 1977, pp. 155–156; Oberbauer 1992, p. 7; Day 1993, p. 847; California Natural Diversity Database (CNDDB) 2008, pp. 1–44), and primarily associated with vernal pools and seasonally flooded alkali vernal plain habitats (Moran 1977, pp. 155–156; Bramlet 1993a, p. 10; Day 1993, p. 847; Ferren and Fiedler 1993, pp. 126–127). In Los Angeles County, *N. fossalis* is known to occur in vernal pools on Cruzan Mesa and the associated drainage of Plum Canyon (such as CNDDB 2008, Element Occurrence (EO) 31, 32, and 41). In Riverside County, *N. fossalis* is known to occur in large vernal pools with basins that range in size from 0.5 ac (0.2 ha) to 10.0 ac (4.0 ha) (such as CNDDB 2008, EO 42, 43, and 44), and in temporary wetlands that are described as seasonally flooded alkali vernal plain habitat along the San Jacinto River and near Salt Creek/Stowe Pool in Hemet (such as CNDDB 2008, EO 22, 23, and 24). In San Diego County, *N. fossalis* is found in vernal pools that are smaller than those in Riverside County, ranging in size from 0.01 ac (0.005 ha) to 0.2 ac (0.09 ha) and are often found in clusters of several vernal pools typically referred to as vernal pool complexes (such as CNDDB 2008, EO 4, 14, and 19). In Mexico, *N. fossalis* is known from fewer than 12 occurrences, most of which are clustered in three areas of Baja California: along the international border, on the plateaus south of the Rio Guadalupe, and on the San Quintin coastal plain (Moran 1977, p. 156).

Ephemeral Wetland Habitat

Despite variation in the types of habitat where *Navarretia fossalis* is found (i.e., vernal pool habitat and seasonally flooded alkali vernal plain habitat), these ephemeral wetlands all share the same temporary nature (i.e., areas fill with water during the winter and spring and dry completely during summer and fall). *Navarretia fossalis* depends on both the inundation and drying of its habitat for survival. This type of ephemerally wet habitat excludes upland plants that live in a dry environment year round, or wetland plants that require year-round moisture to become established (Keeler-Wolf *et al.* 1998).

Navarretia fossalis primarily occurs in ephemeral wetland habitat, more specifically, vernal pool and seasonally flooded alkali vernal plain habitat (Moran 1977, pp. 156–157; Bramlet 1993a, p. 10; Bramlet 1993b, p. 14; Day 1993, p. 847). Vernal pools form during the winter rains in depressions that are part of a gently sloping and undulating landscape, where soil mounds are interspersed with basins (mima-mound topography; Cox 1984, pp. 1397–1398). Water ponds in vernal pools in part due to an underlying impervious soil layer (hard pan or clay pan). *Navarretia fossalis* can also occur in ditches and other artificial depressions associated with degraded vernal pool habitat (Moran 1977, p. 155).

Seasonally flooded alkali vernal plain habitat includes alkali playa, alkali scrub, alkali vernal pool, and alkali annual grassland vegetation types. The hydrologic regime for this habitat involves sporadic seasonal flooding (as described above) combined with slow drainage of the alkaline soils. Large-scale inundation of flood plains occur approximately every 20 to 50 years, which is necessary for long-term maintenance of the habitat by removing scrub vegetation (Roberts 2004, p. 4). During a typical seasonal flooding cycle dry period, alkali scrub vegetation expands its distribution into the seasonally flooded areas of alkali vernal plains habitat and crowds out the species associated more with ephemeral wetlands. During a large-scale flood, standing and slow-draining waters remain for weeks or months and kill alkali scrub vegetation, resulting in favorable conditions for annual ephemeral wetland-associated species (such as *Navarretia fossalis*) to expand their range (Bramlet 2004, p. 8; Roberts 2004, p. 4). Although uncommon, large-scale flooding events maintain *N. fossalis* habitat and likely provide a species dispersal mechanism (Bramlet 2009, p. 3). Seasonally flooded alkali vernal plain can also persist in lightly to moderately disturbed habitat that may obscure or suppress expression of PCEs, especially when disturbance consists of soil amendments or dryland farming activities (Roberts 2009, p. 2).

Subsurface Water Flow That Creates A Local Watershed of Intermixed Wetland and Upland Habitats

Vernal pools within a complex are hydrologically connected by subsurface water, which creates a landscape that is intermixed with wetland and upland habitats. This entire area comprises a local watershed and provides the appropriate physical and biological features necessary to maintain vernal pools within each complex. Seasonally flooded alkali vernal plain habitats are also hydrologically connected by flowing water when it flows over the surface from one vernal pool to another or across the seasonally flooded alkali vernal plain. Due to an impervious hard pan, water flows and collects below ground as the soil becomes saturated. Movement of the water through vernal pool and seasonally flooded alkali vernal plain systems results in pools

filling and holding water continuously for a number of days (Hanes *et al.* 1990, p. 51). For this reason, these ephemeral wetlands are best described from a watershed perspective. The local watershed associated with a vernal pool complex or seasonally flooded alkali vernal plain includes all surfaces in the surrounding area from which water flows into the complex or plain habitat. Some ephemeral wetlands included in this rule (such as the San Jacinto River and the Salt Creek Seasonally Flooded Alkali Plain) have large watersheds where the overland flow of water contributes to the ponding that supports *Navarretia fossalis*, while other ephemeral wetlands have comparatively small watersheds (such as Carroll Canyon and Nobel Drive) and fill almost entirely from direct rainfall (Hanes *et al.* 1990, p. 53; Hanes and Stromberg 1998, p. 38). It is also possible that subsurface flow occurs within a watershed and contributes water to some vernal pools and seasonally flooded alkali vernal plains (Hanes *et al.* 1990, p. 53; Hanes and Stromberg 1998, p. 48). In summary, *N. fossalis* depends on an entire local watershed that includes subsurface water flow over an area that is comprised of intermixed wetland and upland habitats.

Topography and Soils That Support Ponding During Winter and Spring

Topography and soils support ponding that occurs during winter and spring months. Impervious subsurface layers combined with flat to gently sloping topography serve to inhibit rapid infiltration of rainwater, resulting in ponding of vernal pools and seasonally flooded alkali vernal plains (Bramlet 1993a, p. 1; Bauder and McMillian 1998, pp. 57–59). Soils also function to moderate water chemistry and rate of water loss to evaporation (Zedler 1987, pp. 17–30). In Los Angeles County, vernal pools that support *Navarretia fossalis* are found on Cieneba-Pismo-Caperton soils (NRCS SSURGO, ca676. In western Riverside County, seasonally flooded alkali vernal plain habitats that support *N. fossalis* are found on Domino, Traver, Waukena, Chino, (Bramlet 1993a, pp. 1, 10) (59 FR 64812; December 15, 1994) and Willows soils (Bramlet 2009, p. 4). In San Diego County, vernal pool habitats that support *N. fossalis* are found on Huerhuero, Placentia, Olivenhain, Stockpen, and Redding soils (NRCS SSURGO, ca073).

Primary Constituent Elements for *Navarretia Fossalis*

Under the Act and its implementing regulations, we are required to identify the physical and biological features essential to the conservation of *Navarretia fossalis*. The physical and biological features are the primary constituent elements (PCEs) laid out in the appropriate quantity and spatial arrangement essential to the conservation of the species. Areas designated as critical habitat for *N. fossalis* were occupied at the time of listing (see the **Geographic Range and Status** section of the proposed revised rule for a more detailed explanation), are currently occupied, are within the species' historic geographical range, and contain sufficient PCEs to support *N. fossalis*.

Based on our current knowledge of the life history, biology, and ecology of *Navarretia fossalis*, and habitat characteristics required to sustain the essential life history functions of the species, we determined that the PCEs specific to *N. fossalis* are:

(1) PCE 1—*Ephemeral wetland habitat.* Vernal pools (up to 10 ac (4 ha)) and seasonally flooded alkali vernal plains that become inundated by winter rains and hold water or have saturated soils for 2 weeks to 6 months during a year with average rainfall (i.e., years where average rainfall amounts for a particular area are reached during the rainy season (between October and May)). This period of inundation is long enough to promote germination, flowering, and seed production for *Navarretia fossalis* and other native species typical of vernal pool and seasonally flooded alkali vernal plain habitat, but not so long that true wetland species inhabit the areas.

(2) PCE 2—*Intermixed wetland and upland habitats that act as the local watershed.* Areas characterized by mounds, swales, and depressions within a matrix of upland habitat that result in intermittently flowing surface and subsurface water in swales, drainages, and pools described in PCE 1.

(3) PCE 3—*Soils that support ponding during winter and spring.* Soils found in areas characterized in PCEs 1 and 2 that have a clay component or other property that creates an impermeable surface or subsurface layer. These soil types include, but are not limited to: Cieneba-Pismo-Caperton soils in Los Angeles County; Domino, Traver, Waukena, Chino, and Willows soils in Riverside County; and Huerhuero, Placentia, Olivenhain, Stockpen, and Redding soils in San Diego County.

With this revised designation of critical habitat, we intend to conserve the physical and biological features essential to the conservation of the species, through the identification of the appropriate quantity and spatial arrangement of the PCEs sufficient to support the life-history functions of the species. For *Navarretia fossalis*, the size of the ephemeral wetland habitat can vary a great deal, but the most important factor (i.e., the appropriate quantity and spatial arrangement of the PCEs) in any of the subunits designated as critical habitat is that the vernal pool or alkali playa habitat has intact and functioning hydrology and intact adjacent upland areas that ensure a functioning ecosystem. All units and subunits designated as critical habitat contain the PCEs in the appropriate quantity and spatial arrangement essential to the conservation of this species and are currently occupied by *N. fossalis*.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the areas within the geographical area occupied by the species at the time of listing contain the features that are essential to the conservation of the species and which may require special management considerations or protection.

Researchers estimate that greater than 90 percent of the vernal pool habitat in southern California has been converted as a result of past human activities (Bauder and McMillian 1998, pp. 56–67; Keeler-Wolf *et al.* 1998, pp. 10, 60–61, 63–64). A detailed discussion of threats to *Navarretia fossalis* and its habitat can be found in the final listing rule (63 FR 54975; October 13, 1998), the previous critical habitat designation (70 FR 60658; October 18, 2005), and the Recovery Plan for Vernal Pools of Southern California (Service 1998, pp. 1–113, appendices). The features essential to the conservation of *N. fossalis* may require special management considerations or protection to reduce the following threats: habitat destruction and fragmentation from urban and agricultural development; pipeline construction; alteration of hydrology and floodplain dynamics; excessive flooding; channelization; water diversions; off-road vehicle (OHV) activity; trampling by cattle and sheep; weed abatement; fire suppression practices (including discing and plowing to remove weeds and create fire breaks); competition from nonnative plant species; direct and indirect impacts from some human recreational activities (63 FR 54975, October 13, 1998; Service 1998, p. 7); and manure dumping (Roberts 2009, pp. 2–14).

In particular, manure dumping on private property along the San Jacinto River area is impacting habitat within the Western Riverside County MSHCP

area. These impacts are occurring despite identification of these areas as important for the survival and recovery of *Navarretia fossalis* and other sensitive species (such as *Brodiaea filifolia*) addressed in the Western Riverside County MSHCP. Dumping of manure and sewage sludge should be avoided in all areas containing populations of *N. fossalis*. As outlined in the Western Riverside County MSHCP, we have been working with permittees to implement additional ordinances that will help to control activities (such as manure dumping) that may impact the implementation of the Western Riverside County MSHCP conservation objectives. To date, the City of Hemet is the only Western Riverside County MSHCP permittee that has addressed the negative impacts that manure dumping has on species such as *N. fossalis* and *B. filifolia* and their habitat trough the enactment of Ordinance 1666 (i.e., the ordinance that prevents manure dumping activities and educates its citizens). We will continue to work with Riverside County and permittees of the Western Riverside County MSHCP to address activities that may impact the species within this plan area, as well as other HCPs and plan areas that may have other activities that impact *N. fossalis* and its habitat.

Special management considerations or protection are required within critical habitat areas to address these threats. Management activities that could ameliorate these threats include (but are not limited to) fencing *Navarretia fossalis* occurrences to prevent soil compaction and providing signage to discourage encroachment by hikers, cattle, sheep, and OHV activity; control of nonnative plants using methods shown to be effective; guiding the design of development projects to avoid impacts to *N. fossalis* habitat; enacting local ordinances to prohibit manure dumping; and restoring and maintaining natural hydrology and floodplain dynamics of watersheds associated with *N. fossalis* occurrences where feasible. These management activities will protect the PCEs for the species by reducing soil compaction to help maintain an impermeable surface (PCE 3) that supports ephemeral wetland habitat (PCE 1), which is needed to promote germination, flowering, and seed production for *N. fossalis*. Additionally, management of critical habitat lands will help maintain both the wetland and upland habitat that acts as the local watershed and provides intermittent flowing water on the surface and subsurface (PCEs 2 and 3).

Criteria Used To Identify Critical Habitat

As required by section 4(b) of the Act, we used the best scientific and commercial data available to designate critical habitat. We only designate areas outside the geographical area occupied by a species when a designation limited to its present range would be inadequate to ensure the conservation of the species (50 CFR 424.12 (e)). We are not designating any areas outside the geographical area occupied by *Navarretia fossalis* because occupied areas are sufficient for the conservation of the species.

This revised rule updates our 2005 final designation of critical habitat for *Navarretia fossalis* with the best available scientific information. For some areas analyzed in 2005, we have new information from survey reports and public comments that led us to either add or remove areas from critical habitat designation.

This section provides details of the process and criteria we used to delineate a final revised critical habitat designation for *Navarretia fossalis*. This revised rule is based largely on areas that are identified as required for the conservation of *N. fossalis* in the Recovery Plan for Vernal Pools of Southern California (Service 1998, pp.1–113, appendices), the 2005 final critical habitat designation, and new information obtained since that designation. Table 3 in this rule depicts the areas essential for *N. fossalis* conservation; it does not include all locations occupied by *N. fossalis*. It includes only those locations that were:

(1) Included in Appendix F or G of the Recovery Plan;

(2) designated, excluded, or exempt in the 2005 final critical habitat designation;

(3) proposed as critical habitat in the 2009 rule or proposed as critical habitat in the **Federal Register** notice published on April 15, 2010 (75 FR 19575); or

(4) designated, excluded, or exempt in this final revised critical habitat designation.

The unit names used in this revised critical habitat for *N. fossalis* are based on those used for management areas in the 1998 Recovery Plan. The specific changes made to the 2005 final critical habitat designation are summarized in the **Summary of Changes From Previously Designated Critical Habitat** section of this rule.

We analyzed the biology, life history, ecology, and distribution (historical, at the time of listing, and current) of *Navarretia fossalis*. Based on this information, we are designating revised critical habitat in areas within the geographical area occupied by *N. fossalis* at the time of listing and currently occupied that contain the PCEs in the quantity and spatial arrangement to support life-history functions essential to the conservation of the species (see the **Geographic Range and Status** section in the proposed revised rule (74 FR 27588; June 10, 2009) for more information). We are not designating any areas outside the geographical area occupied by the species at the time of listing. All units and subunits contain the PCEs in the appropriate quantity and spatial arrangement essential to the conservation of *N. fossalis*.

TABLE 3. AREAS NECESSARY FOR *Navarretia fossalis* CONSERVATION AS DESCRIBED IN THE 1998 RECOVERY PLAN, 2005 FINAL CRITICAL HABITAT DESIGNATION, 2009 PROPOSED REVISED CRITICAL HABITAT DESIGNATION, 2010 REVISIONS PROPOSED IN THE AVAILABILITY OF THE DEA, AND THIS 2010 FINAL REVISED CRITICAL HABITAT DESIGNATION.

Location*	Recovery Plan Appendix	Final Critical Habitat Subunits (2005)	Proposed Revised Critical Habitat Subunits (based on 2009 proposal and 2010 availability of the DEA)	Final Revised Critical Habitat Subunits (2010)
Unit 1: Los Angeles Basin-Orange Management Area				
Cruzan Mesa	F	1A	1A	1A
Plum Canyon	N/A	1B	1B	1B
Unit 2: San Diego: Northern Coastal Mesa Management Area				

TABLE 3. AREAS NECESSARY FOR *Navarretia fossalis* CONSERVATION AS DESCRIBED IN THE 1998 RECOVERY PLAN, 2005 FINAL CRITICAL HABITAT DESIGNATION, 2009 PROPOSED REVISED CRITICAL HABITAT DESIGNATION, 2010 REVISIONS PROPOSED IN THE AVAILABILITY OF THE DEA, AND THIS 2010 FINAL REVISED CRITICAL HABITAT DESIGNATION.—Continued

Location*	Recovery Plan Appendix	Final Critical Habitat Subunits (2005)	Proposed Revised Critical Habitat Subunits (based on 2009 proposal and 2010 availability of the DEA)	Final Revised Critical Habitat Subunits (2010)
Stuart Mesa, Marine Corps Base (MCB) Camp PendletonRecovery plan (RP)** name: Stuart Mesa	F	4(a)(3) exemption	4(a)(3) exemption	4(a)(3) exemption
Wire Mountain, MCB Camp Pendleton RP name: Wire Mountain	F	—	4(a)(3) exemption	4(a)(3) exemption
Poinsettia Lane Commuter Station RP name: JJ 2 Poinsettia Lane	F	2 (partially excluded under section 4(b)(2))	2	2
Unit 3: San Diego: Central Coastal Mesa Management Area				
Santa Fe Valley (Crosby Estates)	N/A	—	3A	Excluded under section 4(b)(2)
Carroll Canyon (D 5-8)	—	—	3B	3B
Nobel Drive (X 5)	—	—	3C	3C
Large Pool northwest of runway, MCAS Miramar	N/A	—	4(a)(3) exemption	4(a)(3) exemption
EE1-2, MCAS Miramar RP name: EE1-2, Miramar Interior	F	4(a)(3) exemption	—	—
Kearny Mesa (U 19)	N/A	4(a)(3) exemption	—	—
New Century (BB 2)RP name: BB 2 New Century	G	—	—	—
Montgomery Field RP name: N1-4, 6 Montgomery Field	F	Excluded under section 4(b)(2)	3D	3D
Unit 4: San Diego: Inland Management Area				
San Marcos (North L 15)RP name: L 7, 8, 14-20	G	—	—	—
San Marcos (Northwest L 14)RP name: L 7, 8, 14-20	G	—	—	—
San Marcos (L 1-6)RP name: L 1-6, 9-13 San Marcos	F	4C1	4C1	4C1
San Marcos (L 9-10)RP name: L 1-6, 9-13 San Marcos	F	4C2	4C2	4C2
San Marcos (L 11-13)RP name: L 1-6, 9-13 San Marcos	F	4D	4D	4D

TABLE 3. AREAS NECESSARY FOR *Navarretia fossalis* CONSERVATION AS DESCRIBED IN THE 1998 RECOVERY PLAN, 2005 FINAL CRITICAL HABITAT DESIGNATION, 2009 PROPOSED REVISED CRITICAL HABITAT DESIGNATION, 2010 REVISIONS PROPOSED IN THE AVAILABILITY OF THE DEA, AND THIS 2010 FINAL REVISED CRITICAL HABITAT DESIGNATION.—Continued

Location*	Recovery Plan Appendix	Final Critical Habitat Subunits (2005)	Proposed Revised Critical Habitat Subunits (based on 2009 proposal and 2010 availability of the DEA)	Final Revised Critical Habitat Subunits (2010)
San Marcos (North L 15)RP name: L 7, 8, 14-20	G	—	—	—
Ramona RP name: Ramona	F	—	—	—
Ramona RP name: Ramona T	G	4E	4E	4E
Unit 5: San Diego: Southern Coastal Mesa Management Area				
Sweetwater Vernal Pools (S1-3)RP name: Sweetwater Lake	F	5A (partially excluded under section 4(b)(2))	5A	5A
Otay River Valley (M2)	—	5B	5B	5B
Otay Mesa (J26)RP name: J 26 Otay Mesa	F	5C	5C	5C
Proctor Valley (R1)RP name: R Proctor Valley	F	—	5F	5F
Otay Reservoir (K3-5)RP name: K3-5 Otay River	F	—	5G	5G
K1, 2 RP name: K 1, 2, 6, 7 Otay River	G	Excluded under section 4(b)(2)	Does not meet the definition of Critical Habitat	—
K 6, 7 RP name: K 1, 2, 6, 7 Otay River	G	—	—	—
Western Otay Mesa vernal pool complexes RP name: J 2, 5, 7, 11-21, 23-30 Otay Mesa / J 3 Otay Mesa	F / G	Excluded under section 4(b)(2)	5H / 5I	5H / 5I
Western Otay Mesa vernal pool complexes (J 32 (West Otay A + B), J 33 (Sweetwater High School))	N/A	—	5H	5H
Eastern Otay Mesa vernal pool complexes RP name: 23-30 Otay Mesa / J 22 Otay Mesa	F / G	Excluded under section 4(b)(2)	5H / 5I	5H / 5I
Eastern Otay Mesa vernal pool complexes RP name: J 19, 27, 28E, 28W Otay Mesa	—	Excluded under section 4(b)(2)	Does not meet the definition of Critical Habitat	—
RP name: J (undescribed)	G	—	—	—
Unit 6: Riverside Management Area				
San Jacinto River RP name: San Jacinto	F	Excluded under section 4(b)(2)	6A	6A

TABLE 3. AREAS NECESSARY FOR *Navarretia fossalis* CONSERVATION AS DESCRIBED IN THE 1998 RECOVERY PLAN, 2005 FINAL CRITICAL HABITAT DESIGNATION, 2009 PROPOSED REVISED CRITICAL HABITAT DESIGNATION, 2010 REVISIONS PROPOSED IN THE AVAILABILITY OF THE DEA, AND THIS 2010 FINAL REVISED CRITICAL HABITAT DESIGNATION.—Continued

Location*	Recovery Plan Appendix	Final Critical Habitat Subunits (2005)	Proposed Revised Critical Habitat Subunits (based on 2009 proposal and 2010 availability of the DEA)	Final Revised Critical Habitat Subunits (2010)
Salt Creek Seasonally Flooded Alkali Plain RP name: Hemet/ Salt Creek	F	Excluded under section 4(b)(2)	6B	6B
Wickerd Road and Scott Road Pools	N/A	—	6C	6C
Skunk Hollow RP name: Skunk Hollow	—	Excluded under section 4(b)(2)	6D	Excluded under Section 4(b)(2)
RP name: Temecula	F	—	—	—
Mesa de Burro RP name: Santa Rosa Plateau	F	Excluded under section 4(b)(2)	6E	Excluded under Section 4(b)(2)
Total Areas (out of 39 areas listed in this table)	27	22	28	28

*This table does not include all locations occupied by *Navarretia fossalis*. It includes only those locations included in Appendix F or G of the Recovery Plan ("RP" in above table); designated, excluded, or exempt in 2005; proposed as critical habitat in the 2009 rule; proposed as revisions to proposed rule as identified in the document making available the DEA; or designated, excluded, or exempt in this final rule. Note: The alpha-numeric vernal pool labels were applied in the Recovery Plan.

**RP name = Name in Recovery Plan, if different from the current rule.

Appendices F and G of the Recovery Plan provide information on the areas needed to stabilize (prevent extinction of) *Navarretia fossalis* (Appendix F) and the areas that should be conserved and managed to reclassify or recover *N. fossalis* (Appendix G). In Table 3, we summarized the data from the Recovery Plan. According to this summary, 27 locations were highlighted as areas that should be conserved and managed to recover *N. fossalis*. Our 2005 final rule to designate critical habitat (70 FR 60658; October 18, 2005) used the Recovery Plan as the basis for designating critical habitat; however, the rule included some additions to and subtractions from those areas deemed essential to the conservation of *N. fossalis* in the Recovery Plan. Nine areas that the Recovery Plan identified as necessary for recovery were not identified in the 2005 final rule as essential to the conservation of *N. fossalis*, and four areas not in the Recovery Plan were added. These nine areas were sites where we did not have specific occurrence data or areas where recent surveys had not found *N. fossalis*. The four areas added to the 2005 final rule were locations where occurrence data indicated that these areas contained the features essential to the conservation of *N. fossalis*. A total of 22 areas were identified in the 2005 final rule as essential to the conservation of *Navarretia fossalis* (see Table 3).

We did not include seven occurrences of *N. fossalis* highlighted in the Recovery Plan in the proposed revised critical habitat designation or this final rule. We do not have detailed information on these occurrences, and *N. fossalis* has not been observed during recent surveys at some of these sites. Additionally, we included areas in this revised critical habitat (based on new data) that were not identified as necessary for recovery in the Recovery Plan. While some of the areas are different, non-inclusion of some areas in the Recovery Plan and inclusion of other areas for which we have better data will achieve the overall goal of the Recovery Plan for *N. fossalis* and provide for conservation of this species.

In this revised designation of critical habitat for *Navarretia fossalis*, using the best scientific and commercial information, we selected areas that possess those physical and biological features essential to the conservation of the species, and which may require special management considerations or protection. We took into account past conservation planning for *N. fossalis* in the Recovery Plan and in the 2005 critical habitat designation. For this revised rule, we completed the following steps to delineate critical habitat:

(1) Compiled all available data on *N. fossalis* into a GIS database;

(2) Reviewed data to ensure accuracy;

(3) Determined which occurrences were known to occur at the time of listing;

(4) Determined which areas are currently occupied;

(5) Defined the areas containing the features essential to the conservation of *N. fossalis* in terms of core habitat areas and satellite habitat areas;

(6) Determined if each occupied area represents core habitat or satellite habitat and, therefore, should be designated as critical habitat; and

(7) For both core and satellite habitat areas, mapped the specific locations that contain the essential physical and biological features (PCEs in the appropriate quantity and spatial arrangement needed to support life-history functions essential to the conservation of *N. fossalis*).

These steps are described in detail below.

(1) We compiled all available data on *Navarretia fossalis* into a GIS database. Data on locations where *N. fossalis* occurs were based on collections and

observations made by botanists (both amateur and professional), biological consultants, and academic researchers. We compiled data from the following sources to create our GIS database for *N. fossalis*: (a) Data used in the Recovery Plan and in the 2005 final critical habitat rule for *N. fossalis* (70 FR 60658); (b) the CNDDB data report for *N. fossalis* and accompanying GIS records (CNDDB 2008, pp. 1–44); (c) data presented in the City of San Diego's Vernal Pool Inventory for 2002–2003 (City of San Diego 2004, pp. 1–125, appendices); (d) the data report for *N. fossalis* from the California Consortium of Herbaria and accompanying Berkeley Mapper GIS records (Consortium of California Herbaria 2008, pp. 1–17); (e) the Western Riverside County MSHCP species GIS database; and (f) the Carlsbad Fish and Wildlife Office's internal species GIS database, which includes the species data used for the San Diego MSCP and the San Diego MHCP, reports from section 7 consultations, and Service observations of *N. fossalis* (Carlsbad Fish and Wildlife Office's internal species GIS database).

(2) We reviewed the *Navarretia fossalis* data that we compiled to ensure its accuracy. We checked each data point in our database to ensure that it represented an original collection or observation of *N. fossalis*. Data that did not represent an original collection or observation were removed from our database. We checked each data point to ensure that it was mapped in the correct location. Data points that did not match the description for the original collection or observation were remapped in the correct location or removed from our database.

(3) We determined which *Navarretia fossalis* occurrences existed at the time of listing. We concluded that all known occurrences, except for a single occurrence translocated after this species was listed, were extant at the time of listing. We drew this conclusion because *N. fossalis* has limited dispersal capabilities. We believe the documentation of additional occurrences after the species was listed was due to an increased effort to survey for this species. In other words, we do not believe this species has naturally colonized any new areas since it was listed.

(4) We determined which areas are currently occupied by *Navarretia fossalis*. For areas where we had past occupancy data for the species, we assumed the area is currently occupied unless: (a) Two or more rare plant surveys conducted during the past 10 years did not find *N. fossalis* (providing the surveys were conducted in years with average rainfall (i.e., years where average rainfall amounts for a particular area are reached during the rainy season between October and May)) and during the appropriate months to find this species (i.e., March, April, and May); or (b) the site was significantly disturbed since the last observation of the species at that location.

(5) We defined the areas necessary for conservation of *Navarretia fossalis* in terms of "core habitat areas" and "satellite habitat areas." See the **Areas Needed for Conservation: Core and Satellite Habitat Areas** section in this rule for definitions of these areas.

(6) We determined if each occupied area represents core habitat or satellite habitat. In the final listing rule (63 FR 54975; October 13, 1998), we stated that 60 percent of the known *Navarretia fossalis* occurrences are concentrated in three locations: Otay Mesa in southern San Diego County, along the San Jacinto River in western Riverside County, and near Hemet in Riverside County (referred to as the Salt Creek Seasonally Flooded Alkali Plain in this final critical habitat rule). These three areas represent core habitat for *N. fossalis*. In addition to these three core habitat areas, Mesa de Burro in Riverside County represents core habitat for this species due to the large species abundance observed there in 2008, and the large amount of intact vernal pool habitat on this mesa. In total, we identified four core habitat areas for *N. fossalis*. Large populations of *N. fossalis* are currently present in these four areas, but there have been significant impacts to these areas in the form of habitat fragmentation, nonnative plant invasion, agricultural activities, and unauthorized recreational use. Because these four areas represent large, interconnected ephemeral wetland areas and large *N. fossalis* populations, they are essential to, and will serve as anchors for, the overall conservation effort for this species. Additionally, the conservation of these four areas will sustain the largest populations of *N. fossalis*, allowing the species to persist where it will be less constrained by the threats that negatively impact its essential habitat features (PCEs).

Habitat areas outside the four core habitat areas also support stable, intact occurrences of *Navarretia fossalis*. These satellite areas represent unique habitat within this species' range that also contain the PCEs laid out in the appropriate quantity and spatial arrangement essential to the conservation of the species. The satellite habitat areas occur over a wide range of soils and at various elevations that include several occurrences over a range of environmental variables, the preservation of which will help maintain the genetic diversity of *N. fossalis*. The satellite habitat areas are essential to the conservation of *N. fossalis* because they allow for connections between existing occurrences of the species, and together with the core habitat areas, will create a sustainable matrix of habitat for *N. fossalis* that will enable it to evolve and potentially respond to future environmental changes.

Areas of essential habitat that are smaller than core habitat areas were selected as satellite habitat areas if *Navarretia fossalis* persists from year to year (i.e., areas that may be isolated and likely to be genetically unique), and are: (a) on the periphery of this species' geographical distribution; (b) geographically isolated from other occurrences; or (c) provide connections between other satellite or core habitat areas. Additional discussion about exceptions to the assignment of satellite areas is found below in the **Critical Habitat Units** section of this rule.

(7) For the core and satellite habitat areas, we mapped the specific areas that contain the physical and biological features (the PCEs) in the quantity and spatial arrangement needed to support life history functions essential to *Navarretia fossalis*. We first mapped the ephemeral wetland habitat in the occupied area using occurrence data, aerial imagery, and 1:24,000 topographic maps. We then mapped the intermixed wetland and upland habitats that make up the local watersheds and the topography and soils that support the occupied ephemeral wetland habitat. We identified the gently sloping area associated with ephemeral wetland habitat and any adjacent areas that slope toward and contribute to the hydrology of the ephemeral wetland habitat. In most cases, we delineated the border of revised critical habitat around the occupied ephemeral wetlands and associated local watershed areas to follow natural breaks in the terrain such as ridgelines, mesa edges, and steep canyon slopes.

When determining the revised critical habitat boundaries, we made every effort to map precisely only the areas that contain the PCEs and provide for the conservation of *Navarretia fossalis*. However, due to the mapping scale that we use to draft critical habitat boundaries, we cannot guarantee that every fraction of revised critical habitat contains the PCEs. Additionally, we made every attempt to avoid including developed areas such as lands underlying buildings, paved areas, and other structures that lack PCEs for *N.*

fossalis. 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 areas. Any developed structures and the land under them inadvertently left inside critical habitat boundaries shown on the maps of this revised critical habitat designation are excluded by text in this rule and are not designated as critical habitat. Therefore, Federal actions involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific actions may affect the species or PCEs in adjacent critical habitat.

Revised Critical Habitat Designation

We are designating 6 units that include 19 subunits as critical habitat for *Navarretia fossalis*. Table 4 identifies the approximate area of each critical habitat subunit by land ownership. These subunits, which generally correspond to the geographic area of the subunits delineated in the 2005 designation, replace the current critical habitat designation for *N. fossalis* in 50 CFR 17.96(a). The critical habitat areas we describe below constitute our best assessment of areas determined to be occupied at the time of listing that contain the primary constituent elements in the appropriate quantity and spatial arrangement (i.e., essential features) which may require special management considerations or protection. We are not designating any unoccupied areas or areas outside of the species' historical range because we determined that occupied lands within the species' historical range are sufficient for the conservation of *N. fossalis* provided that these lands are protected or receive special management considerations for *N. fossalis*.

TABLE 4. AREA AND OWNERSHIP FOR LANDS INCLUDED IN THE *Navarretia fossalis* REVISED CRITICAL HABITAT DESIGNATION.

Location	Federal	State Government	Local Government	Private	Total
Unit 1: Los Angeles Basin-Orange Management Area					
1A. Cruzan Mesa	—	—	—	156 ac (63 ha)	156 ac (63 ha)
1B. Plum Canyon	—	—	—	20 ac (8 ha)	20 ac (8 ha)
Unit 2: San Diego: Northern Coastal Mesa Management Area					
2. Poinsettia Lane Commuter Station	—	—	6 ac (3 ha)	3 ac (1 ha)	9 ac (4 ha)
Unit 3: San Diego: Central Coastal Mesa Management Area					
3B. Carroll Canyon	—	—	17 ac (7 ha)	1 ac (< 1 ha)	18 ac (7 ha)
3C. Nobel Drive	—		37 ac (15 ha)	—	37 ac (15 ha)
3D. Montgomery Field	—	—	48 ac (20 ha)	—	48 ac (20 ha)
Unit 4: San Diego: Inland Management Area					
4C1. San Marcos (Upham)	—	—	—	34 ac (14 ha)	34 ac (14 ha)
4C2. San Marcos (Universal Boot)	—	—	15 ac (6 ha)	17 ac (7 ha)	32 ac (13 ha)
4D. San Marcos (Bent Avenue)	—	—	—	5 ac (2 ha)	5 ac (2 ha)
4E. Ramona	—	—	3 ac (1 ha)	132 ac (53 ha)	135 ac (55 ha)
Unit 5: San Diego: Southern Coastal Mesa Management Area					
5A. Sweetwater Vernal Pools (S1-3)	23 ac (9 ha)	1 ac (<1 ha)	71 ac (29 ha)	—	95 ac (38 ha)
5B. Otay River Valley (M2)	—	—	—	24 ac (10 ha)	24 ac (10 ha)
5C. Otay Mesa (J26)	—	2 ac (1 ha)	24 ac (10 ha)	16 ac (7 ha)	42 ac (17 ha)
5F. Proctor Valley (R1-2)	—	—	51 ac (21 ha)	37 ac (15 ha)	88 ac (36 ha)

TABLE 4. AREA AND OWNERSHIP FOR LANDS INCLUDED IN THE *Navarretia fossalis* REVISED CRITICAL HABITAT DESIGNATION.—Continued

Location	Federal	State Government	Local Government	Private	Total
5G. Otay Lakes (K3-5)	—	—	140 ac (57 ha)	—	140 ac (57 ha)
5H. Western Otay Mesa vernal pool complexes	—	—	41 ac (17 ha)	98 ac (40 ha)	139 ac (56 ha)
5I. Eastern Otay Mesa vernal pool complexes	—	—	—	221 ac (89 ha)	221 ac (89 ha)
Unit 6: Riverside Management Area					
6A. San Jacinto River	—	1,504 ac (608 ha)	—	2,808 ac (1,136 ha)	4,312 ac (1,745 ha)
6B. Salt Creek Seasonally Flooded Alkali Plain	—	—	—	930 ac (376 ha)	930 ac (376 ha)
6C. Wickerd Road and Scott Road Pools	—	—	—	235 ac (95 ha)	235 ac (95 ha)
Total	23 ac (9 ha)	1,507 ac (610 ha)	453 ac (183 ha)	4,737 ac (1,917 ha)	6,720 ac (2,720 ha)*

*Values in this table may not sum due to rounding.

Critical Habitat Units

Presented below are brief descriptions of all subunits included in the *Navarretia fossalis* revised critical habitat designation and reasons why they meet the definition of critical habitat for the species. The units in this revised critical habitat correspond to the management areas described in the 1998 Recovery Plan for Vernal Pools of Southern California. Each subunit contains either: (1) A core habitat area; or (2) a satellite habitat area that provides connectivity between core habitat areas or other satellite habitat areas. Areas identified as subunits that harbor satellite habitat areas were identified as containing features essential to the conservation of the species (compared to other areas not identified as essential habitat) due to a combination of their geographic proximity to core habitat areas, their status as an area that supports a stable occurrence (representing occurrences that continue to persist within a given geographic area), and the likelihood that these particular habitat areas support genetically unique occurrences. Other areas not qualifying as satellite areas are occurrences that are represented by one or more of the following characteristics: Occurrence consisting of few individuals; no detailed information on occurrence; lack of observations during recent surveys; locations not identified in the Recovery Plan; or areas have low likelihood of persistence due to fragmentation or enclosure by developed areas.

Unit 1: Los Angeles Basin—Orange Management Area

Unit 1 is located in northwestern Los Angeles County and consists of two subunits totaling 176 ac (71 ha) of private land.

Subunit 1A: Cruzan Mesa

Subunit 1A is located near the City of Santa Clarita in Los Angeles County. This subunit is on Cruzan Mesa, northwest of Forest Park and the Sierra Highway and southwest of Vasquez Canyon Road. Subunit 1A consists of 156 ac (63 ha) of private land and meets our selection criteria as satellite habitat. Cruzan Mesa is one of the only areas in Los Angeles County that supports mesa-top vernal pools. As satellite habitat, this subunit supports a stable occurrence of *Navarretia fossalis*, provides potential connectivity with Subunit 1B, and likely supports a genetically distinct occurrence because of the separation of these two northern occurrences from other occurrences of *N. fossalis*. This subunit and Subunit 1B (described below) represent the most northern occurrences of this species. Subunit 1A contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as mowing or grading) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 1B: Plum Canyon

Subunit 1B is located near the City of Santa Clarita in Los Angeles County. This subunit is in Plum Canyon, west of Forest Park and the Sierra Highway and north of Plum Canyon Road. Subunit 1B consists of 20 ac (8 ha) of private land and meets our selection criteria as satellite habitat. As satellite habitat, this subunit supports a stable occurrence of *Navarretia fossalis*, provides potential connectivity with Subunit 1A, and likely supports a genetically distinct occurrence because of the separation of these two northern occurrences from other occurrences of *N. fossalis*. The Plum Canyon vernal pool habitat occurs on a flat area down-slope from the

vernal pools on Cruzan Mesa. The vernal pools on Cruzan Mesa (Subunit 1A) and Plum Canyon represent the only habitat for *N. fossalis* in Los Angeles County and the most northern occurrences of this species. Subunit 1B contains the physical or biological features essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species within this subunit. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Unit 2: San Diego—Northern Coastal Mesa Management Area

Poinsettia Lane Commuter Station

Unit 2 is located in the City of Carlsbad in San Diego County and contains 6 ac (3 ha) of land owned by the North County Transit District and 3 ac (1 ha) of private land. This unit is loosely bounded by Avenida Encinas on the north, a housing development on the east, Poinsettia Lane on the south, and train tracks on the west. Unit 2 meets our selection criteria as satellite habitat because it supports a stable occurrence of *Navarretia fossalis* and provides potential connectivity between occurrences on MCB Camp Pendleton and Subunits 4C1, 4C2, and 4D. The Poinsettia Lane vernal pool complex consists of a series of vernal pools that run parallel to a berm created by the train tracks. Unit 2 contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). 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 nonnative plant species and activities (such as unauthorized recreational use) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Unit 3: San Diego—Central Coastal Mesa Management Area

Unit 3 is located in central coastal San Diego County and consists of three subunits totaling 103 ac (42 ha). This unit contains 102 ac (42 ha) owned by State and local governments, and approximately 1 ac (less than 1 ha) of private land.

Subunit 3B: Carroll Canyon

Subunit 3B is located in the City of San Diego in San Diego County. This subunit is located to the southwest of the intersection of Parkdale Avenue and Osgood Way, and is loosely bounded by residential development on the north, open space to the east, and a quarry to the south and west. Subunit 3B consists of approximately 18 ac (7 ha) that includes 17 ac (7 ha) of land owned by State or local governments and 1 ac (less than 1 ha) of private land. Subunit 3B meets our selection criteria as satellite habitat because it supports a stable occurrence of *Navarretia fossalis* and provides potential connectivity between occurrences in Subunits 3A and 3C. The Carroll Canyon vernal pool complex consists of a group of vernal pools on the edge of a mesa north of Carroll Canyon. Historically, there may have been more habitat for this species; however, the majority of vernal pool habitat in the vicinity of this subunit has been developed. Subunit 3B contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as trespass or illegal trash dumping) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 3C: Nobel Drive

Subunit 3C is located in the City of San Diego in San Diego County. This subunit is loosely bounded by the 805 interstate on the northeast, train tracks on the south, and Nobel Drive on the northwest. Subunit 3C consists of 37 ac (15 ha) of land owned by local government and meets our selection criteria as satellite habitat because it supports a stable occurrence of *Navarretia fossalis* and provides potential connectivity between occurrences in Subunits 3B and 3D. The Nobel Drive vernal pool complex consists of a group of vernal pools on a mesa-top north of Rose Canyon. Subunit 3C contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as unauthorized recreational use) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 3D: Montgomery Field

Subunit 3D is located in the City of San Diego in San Diego County. This subunit is located at Montgomery Field (airport) to the northeast of the runway area. Subunit 3D consists of 48 ac (20 ha) of land owned by the City of San Diego and meets our selection criteria as satellite habitat. As satellite habitat, this subunit supports a stable occurrence of *Navarretia fossalis* and provides potential connectivity with the occurrence in Subunit 3C. The Montgomery Field vernal pool complex consists of a large group of vernal pools east of the runway area at Montgomery Field, although only the northeastern portion of this vernal pool complex is being designated as critical habitat because the southeastern portion of this vernal pool complex has been hydrologically disconnected from other vernal pools by past development, is now isolated, and does not meet the definition of essential habitat. *Navarretia fossalis* has not been documented in the southeastern portion of this vernal pool complex. Subunit 3D contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2),

and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Unit 4: San Diego—Inland Management Area

Unit 4 is located within inland San Diego County and consists of four subunits totaling 206 ac (83 ha). This unit contains 18 ac (7 ha) owned by State and local governments, and 188 ac (76 ha) of private land.

Subunits 4C1, 4C2, and 4D: San Marcos

Subunits 4C1, 4C2, and 4D are located in the City of San Marcos in San Diego County. These three subunits consist of three separate vernal pool complexes. The first (Subunit 4C1) is loosely bounded by La Mirada Drive on the northeast, Las Posas Road on the southeast, Linda Vista Drive on the southwest, and South Pacific Street on the northwest. The second (Subunit 4C2) is loosely bounded by Linda Vista Drive on the northeast, Las Posas Road on the east, West San Marcos Boulevard on the south, and South Pacific Street on the west. The third (Subunit 4D) is loosely bounded by South Bent Avenue on the northeast, commercial development on the southeast and southwest, and Linda Vista Drive on the northwest. Subunit 4C1 consists of 34 ac (14 ha) of private land, Subunit 4C2 consists of 15 ac (6 ha) of land owned by local government and 17 ac (7 ha) of private land, and Subunit 4D consists of 5 ac (2 ha) of private land. These three subunits meet our selection criteria as satellite habitat areas because they support stable occurrences of *Navarretia fossalis* and provide potential connectivity between occurrences in Unit 2 and Subunit 4E. We grouped these vernal pool complexes because of the clustered nature of these occurrences. These subunits have separate subunit numbers to be consistent with the numbering identified in the 2005 critical habitat designation. Subunits 4C1, 4C2, and 4D contain the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in these subunits may require special management considerations or protection to address threats from nonnative plant species and activities (such as commercial development, trespass, or OHV use) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 4E: Ramona

Subunit 4E is located in the unincorporated community of Ramona. This subunit is loosely bounded by the Ramona Airport and Ramona Airport Road on the north, Sawday Road on the east, Santa Maria Creek on the south, and a series of rock outcrops on the west. Subunit 4E consists of approximately 135 ac (55 ha) that includes 3 ac (1 ha) of land owned by State or local governments and 132 ac (53 ha) of private land. Subunit 4E meets our selection criteria as satellite habitat because it supports a stable occurrence of *Navarretia fossalis* and provides potential connectivity with occurrences in Subunits 4C1, 4C2, and 4D. The vernal pools in this subunit occur in gently sloping grassland habitat and are at the highest elevation where *N. fossalis* is known to occur. Subunit 4E contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as agricultural activities or recreational use) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Unit 5: San Diego—Southern Coastal Mesa Management Area

Unit 5 is located in southern San Diego County and consists of six subunits totaling 748 ac (303 ha). This unit contains 28 ac (11 ha) of federally owned land, 330 ac (134 ha) of land owned by State and local governments, and 390 ac (158 ha) of private land.

Subunit 5A: Sweetwater Vernal Pools

Subunit 5A is located southwest of the Sweetwater Reservoir. This subunit is loosely bounded by the Sweetwater Reservoir on the north, steeply sloping topography on the east, State Route 125 on the south, and an unnamed drainage on the west. Subunit 5A consists of approximately 95 ac (38 ha) and includes 23 ac (9 ha) of Federal land that is part of the San Diego National Wildlife Refuge Complex, 1 ac (less than 1ha) of land owned by the State, and 71 ac (29 ha) of land owned by local government. This subunit meets our selection criteria as satellite habitat. This satellite habitat subunit supports a stable occurrence of *Navarretia fossalis* and provides potential connectivity between occurrences in Subunits 5B and 5F. Some of the area occupied by *N. fossalis* was lost during the construction of State Route 125. The soil from that area was salvaged and is being used to restore other vernal pools in this subunit. Subunit 5A contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as unauthorized recreational use) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 5B: Otay River Valley

Subunit 5B is located in the City of Chula Vista and unincorporated San Diego County. This subunit is loosely bounded by Olympic Parkway on the north, a housing development on the east, and a landfill to the southwest. Subunit 5B consists of 24 ac (10 ha) of private land and meets our selection criteria as satellite habitat because it supports a stable occurrence of *Navarretia fossalis* and provides potential connectivity between occurrences of *N. fossalis* in Subunits 5A and 5H. Subunit 5B contains the

physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as unauthorized recreational use) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 5C: Otay Mesa

Subunit 5C is located on the eastern portion of Otay Mesa, directly northwest of and adjacent to the George F. Bailey Detention Facility at the terminus of Alta Road. Subunit 5C consists of 26 ac (11 ha) of State and local government-owned land, and 16 ac (7 ha) of private land, and it meets our selection criteria as satellite habitat because it supports a stable occurrence of *Navarretia fossalis* and provides potential connectivity between occurrences of *N. fossalis* in Subunits 5G and 5I. Subunit 5C contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as unauthorized recreational use) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 5F: Proctor Valley

Subunit 5F is located between the unincorporated communities of Eastlake and Jamul in San Diego County. This subunit is located along Proctor Valley Road in Proctor Valley. Subunit 5F consists of approximately 88 ac (36 ha) and includes 51 ac (21 ha) of land owned by the City of San Diego and 37 ac (15 ha) of private land. Subunit 5F meets our selection criteria as satellite habitat because it supports a stable occurrence of *Navarretia fossalis* and provides potential connectivity between occurrences of *N. fossalis* in Subunits 5A and 5G. The vernal pools in this subunit occur in Proctor Valley on a flat area that is slightly elevated from the stream channel that runs through this valley. The vernal pools in this subunit to the west of Proctor Valley Road are severely impacted by OHV use, but the vernal pools to the east of Proctor Valley road remain relatively intact. Subunit 5F contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as unauthorized recreational use or OHV use) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 5G: Otay Lakes

Subunit 5G is located east of the City of Chula Vista in San Diego County. This subunit is loosely bounded by Lower Otay Reservoir to the north and west and by the slopes of Otay Mountain to the southeast. Subunit 5G consists of 140 ac (57 ha) of land owned by State or local governments and meets our selection criteria as satellite habitat because this location supports a stable occurrence of *Navarretia fossalis* and provides potential connectivity between occurrences of *N. fossalis* in Subunits 5F and 5I. The vernal pool complexes in this subunit are located on the flat areas to the south of Lower Otay Reservoir. Subunit 5G contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as unauthorized recreational use) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 5H: Western Otay Mesa vernal pool complexes

Subunit 5H is located within the Otay Mesa Community planning area of the City of San Diego. Subunit 5H consists of approximately 139 ac (56 ha) that includes 41 ac (17 ha) of land owned by local governments and 98 ac (40 ha) of private land. Subunit 5H and Subunit 5I encompass the core habitat on Otay Mesa. As core habitat, this subunit contains a large area of habitat that supports sizable occurrences of *Navarretia fossalis* and provides potential connectivity between occurrences in Subunits 5G and 5I. This subunit contains several mesa-top vernal pool complexes on western Otay Mesa (Bauder vernal pool complexes J 2N, J 2S, J 2W, J 4, J 13N, J 13S, J 14, J 33, J 34 as in Appendix D of City of San Diego, 2004). Subunit 5H contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as unauthorized recreational use or residential and commercial development) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 5I: Eastern Otay Mesa vernal pool complexes

Subunit 5I is located in the City of San Diego. This subunit contains several mesa top vernal pool complexes on eastern Otay Mesa. Subunit 5I consists of 221 ac (89 ha) of private land. Subunit 5I and Subunit 5H encompass the core habitat on Otay Mesa. As core habitat, Subunit 5I contains a large area of habitat that supports sizable occurrences of *Navarretia fossalis* and provides potential connectivity between occurrences in Subunits 5B and 5H.

This subunit contains several mesa-top vernal pool complexes on eastern Otay Mesa (Bauder vernal pool complexes J 22, J 29, J 30, J 31N, J 31S as in Appendix D of City of San Diego, 2004 and Service GIS). Subunit 5I contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as unauthorized recreational use or residential and commercial development) that occur in the vernal pool basins. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Unit 6: Riverside Management Area

Unit 6 is located in western Riverside County and consists of three subunits totaling 5,477 ac (2,217 ha). This unit contains 1,504 ac (609 ha) of land owned by the State of California's Department of Fish and Game and 3,973 ac (1,608 ha) of private land.

Subunit 6A: San Jacinto River

Subunit 6A is generally located along the San Jacinto River near the cities of Hemet and Perris in Riverside County. This subunit is loosely bounded by Mystic Lake on the northeast and by the Perris Airport on the southwest. Subunit 6A consists of approximately 4,312 ac (1,745 ha), including 1,504 ac (609 ha) of land owned by State or local governments and 2,808 ac (1,136 ha) of private land. Subunit 6A encompasses core habitat along the San Jacinto River. As core habitat, this subunit contains a large area of habitat that supports sizable occurrences of *Navarretia fossalis* and provides potential connectivity between occurrences in Subunits 6B and 6C. This subunit consists of seasonally flooded alkali vernal plains that occur along the San Jacinto River. Subunit 6A contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as manure dumping or flood control) that occur in the vernal pool basins and associated watershed area. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 6B: Salt Creek Seasonally Flooded Alkali Plain

Subunit 6B is located near the City of Hemet and west of the Hemet-Ryan Airport in Riverside County. This subunit is loosely bounded by Devonshire Avenue on the north, the boundary for the City of Hemet on the east, train tracks on the south, and low-lying hills on the west. Subunit 6B consists of 930 ac (376 ha) of private land that encompasses the core habitat along the Upper Salt Creek drainage west of the City of Hemet. As core habitat, this subunit contains a large area of habitat that supports sizable occurrences of *Navarretia fossalis* and provides potential connectivity between occurrences in Subunits 6A and 6C. This subunit consists of seasonally flooded alkali vernal plains not subject to U.S. Army Corps of Engineer jurisdiction. Subunit 6B contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as manure dumping, grazing, flood control, or discing for vegetation control) that occur in the vernal pool basins and associated watershed area. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Subunit 6C: Wickerd and Scott Road Pools

Subunit 6C is located in the City of Menifee in Riverside County, California. This subunit is loosely bounded by low lying hills north of Garbani Road on the north, Briggs Road on the east, Scott Road on the south, and Menifee Road on the west. Subunit 6C consists of 235 ac (95 ha) of private land. This subunit meets our selection criteria as satellite habitat because this location supports a stable occurrence of *Navarretia fossalis* and provides potential connectivity among occurrences of *N. fossalis* in Subunits 6A, 6B, and with Subunit 6D that we are excluding under section 4(b)(2) of the Act (see **Application Section 4(b)(2) of the Action** section). This subunit consists of two large vernal pools. Subunit 6C contains the physical and biological features that are essential to the conservation of *N. fossalis*, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3). The physical and biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from nonnative plant species and activities (such as manure dumping, residential or agricultural development, discing for vegetation control, or maintenance of existing pipelines) that occur in the vernal pool basins and associated watershed area. Please see the **Special Management Considerations or Protection** section of this rule for a discussion of the threats to *N. fossalis* habitat and potential management considerations.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Decisions by the Fifth and Ninth Circuit Courts of Appeals have invalidated our 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, 442F (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 remain functional (or retain those physical and biological features that relate to the ability of the

area to periodically support the species) to serve its intended conservation role for the species (Service 2004a, p. 3).

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or to destroy or adversely modify its critical habitat. 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. As a result of this 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 designated critical habitat; or

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

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. 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 jeopardizing the continued existence of the listed species or 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 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.

Federal activities that may affect *Navarretia fossalis* or its designated critical habitat require section 7 consultation under the Act. Activities on State, Tribal, local, or private lands requiring a Federal permit (such as a permit from the U.S. Army Corps of Engineers (Corps) under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from us under section 10 of the Act) or involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency) are subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat, and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or permitted, do not require section 7 consultations.

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 remain functional to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical and biological features to an extent that appreciably reduces the conservation value of critical habitat for *Navarretia fossalis*. As discussed above, the role of critical habitat is to support the life history needs of the species and provide for the conservation of the species. For *N. fossalis*, this includes supporting viable occurrences and recovery of the species in core habitat areas and satellite habitat areas.

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, when carried out, funded, or authorized by a Federal agency, may affect critical habitat and, therefore, should result in consultation for *Navarretia fossalis* include, but are not limited to (please see **Special Management Considerations or Protection** section for a more detailed discussion on the impacts of these actions to the listed species):

(1) Actions that would impact the ability of an ephemeral wetland to continue to provide habitat for *Navarretia fossalis* and other native species that require this specialized habitat type. Such activities could include, but are not limited to, water impoundment, stream channelization, water diversion, water withdrawal, and development activities. These activities could alter the biological and physical features essential to the conservation of *N. fossalis* that provide the appropriate habitat for the species by eliminating ponding habitat; changing the duration and frequency of the ponding events on which this species relies; making the habitat too wet, thus allowing obligate wetland species to become established; making the habitat too dry, thus allowing upland species to become established; causing large amounts of sediment or manure to be deposited in *N. fossalis* habitat; or causing increased erosion and incising of waterways.

(2) Actions that would impact the soil and topography that cause water to pond during the winter and spring months. Such activities could include, but are not limited to, deep ripping of soils, trenching, soil compaction, and development activities. These activities could alter the biological and physical features essential to the conservation of *Navarretia fossalis* that provide the appropriate habitat for the species by eliminating ponding habitat, impacting the impervious nature of the soil layer, or making the soil so impervious that water pools for an extended period that is detrimental to *N. fossalis* (as described in the PCEs).

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."

We consult with the military on the development and implementation of INRMPs for installations with federally listed species. Any INRMPs developed by military installations located within the range of *Navarretia fossalis* and that contain those features essential to the species' conservation were analyzed for exemption under the authority of section 4(a)(3)(B) of the Act.

Both MCB Camp Pendleton and MCAS Miramar have approved INRMPs that address *Navarretia fossalis,* and the Marine Corps (on both installations) has committed to work closely with us, California Department of Fish and Game (CDFG), and California Department of Parks and Recreation to continually refine the existing INRMPs as part of the Sikes Act's INRMP review process. In accordance with section 4(a)(3)(B)(i) of the Act, we determined that conservation efforts identified in the INRMPs will provide a benefit to *N. fossalis* occurring in habitats within or adjacent to MCB Camp Pendleton and MCAS Miramar (see the following sections that detail this determination for each installation). Therefore, 213 ac (86 ha) of habitat on MCB Camp Pendleton and MCAS Miramar are exempt from this revised critical habitat for *N. fossalis* under section 4(a)(3) of the Act.

Marine Corps Base Camp Pendleton (MCB Camp Pendleton)

In the previous final critical habitat designation for *Navarretia fossalis* (70 FR 60658; October 18, 2005) and the proposed revised critical habitat designation (74 FR 27588; June 10, 2009), we exempted MCB Camp Pendleton from the designation of critical habitat. We based this decision on the conservation benefits to *N. fossalis* identified in the INRMP developed by MCB Camp Pendleton in November 2001 and the updated INRMP that was prepared by MCB Camp Pendleton in March 2007 (Marine Corp Base Camp Pendleton 2007). We determined that conservation efforts identified in the INRMP provide a benefit to the occurrences of *N. fossalis* and vernal pool habitat occurring on MCB Camp Pendleton (Marine Corps Base Camp Pendleton 2007, Section 4, pp. 51–76). This conservation protects the 145 ac (59 ha) of habitat that we believe to be essential for the conservation of *N. fossalis* on Stuart Mesa and near the Wire Mountain Housing Complex. Therefore, lands containing features essential to the conservation of *N. fossalis* on this installation are exempt from this revised critical habitat for *N. fossalis* under section 4(a)(3) of the Act. For more information on the conservation benefits afforded to *N. fossalis* at MCB Camp Pendleton, please see the **Exemptions Under Section 4(a)(3) of the Act** section in the proposed revised critical habitat rule (74 FR 27610).

Marine Corps Air Station Miramar (MCAS Miramar)

In the previous final critical habitat designation for *Navarretia fossalis* (70 FR 60658; October 18, 2005) and the proposed revised critical habitat designation (74 FR 27588; June 10, 2009), we exempted MCAS Miramar from the designation of critical habitat (70 FR 60658; October 18, 2005). We based this decision on the conservation benefits to *N. fossalis* identified in the INRMP developed by MCAS Miramar in May 2000 and the updated INRMP prepared by MCAS Miramar in October 2006 (Gene Stout and Associates *et al.* 2006). We determined that conservation efforts identified in the INRMP provide a benefit to the occurrences of *N. fossalis* and vernal pool habitat on the 69 ac (28 ha) of habitat on the western portion of MCAS Miramar (Gene Stout and Associates *et al.* 2006, Section 7, pp. 17–23). Therefore, lands containing features essential to the conservation of *N. fossalis* on this installation are exempt from the revised critical habitat for *N. fossalis* under section 4(a)(3) of the Act. For more information on the conservation benefits afforded to *N. fossalis* at MCAS Miramar, please see the **Exemptions Under Section 4(a)(3) of the Act** section in the proposed revised critical habitat rule (74 FR 27610).

Exclusions

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

Section 4(b)(2) of the Act states that the Secretary must designate and revise 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. In making that determination, the legislative history is clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

In the following paragraphs, we address a number of general issues that are relevant to our analysis under section 4(b)(2) of the Act.

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

When considering the benefits of inclusion for an area, we consider the additional regulatory benefits that area would receive from the protection from adverse modification or destruction as a result of actions with a Federal nexus; the educational benefits of mapping essential habitat for recovery of the listed species; and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

When considering the benefits of exclusion, we consider, among other things, whether exclusion of a specific

area is likely to result in long–term conservation; the continuation, strengthening, or encouragement of partnerships that result in conservation of listed species; or implementation of a management plan that provides equal to or more conservation than a critical habitat designation would provide. Specifically, when evaluating a conservation plan we consider, among other factors: whether the plan is finalized; how it provides for the conservation of the essential physical and biological features; whether the conservation management strategies and actions contained in a management plan are in place and there is a strong likelihood they will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

After evaluating the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to determine whether the benefits of exclusion outweigh those of inclusion. If we determine that they do, we then determine whether exclusion would result in extinction. If exclusion of an area from critical habitat will result in extinction, we will not exclude it from the designation.

In the case of *Navarretia fossalis*, the revised critical habitat designation does not include any Tribal lands or trust resources. However, this revised critical habitat designation does include some lands covered by three completed HCPs for *N. fossalis*. No new HCP or conservation plan covering the distribution of this species has been approved since the proposed revised designation that published in the **Federal Register** on June 10, 2009 (74 FR 27588).

Based on the information provided by entities seeking exclusion, as well as other comments we received, we evaluated whether certain lands in the proposed critical habitat Units 3 and 6 were appropriate for exclusion from this final designation.

After considering the following areas under section 4(b)(2) of the Act, we are excluding them from the critical habitat designation for *Navarretia fossalis*: Subunit 3A within the County of San Diego Subarea Plan under the MSCP, and Subunits 6D and 6E within the Western Riverside County MSHCP (see Table 5 below). As described in the following exclusion analyses for the two HCPs, we made this determination because we believe that:

(1) Their value for *N. fossalis* conservation will be preserved for the foreseeable future by existing protective actions, and

(2) They are appropriate for exclusion under the "other relevant factor" provisions of section 4(b)(2) of the Act.

TABLE 5. AREAS BEING EXCLUDED UNDER SECTION 4(B)(2) OF THE ACT FROM THIS REVISED CRITICAL HABITAT DESIGNATION.

Subunit	Area excluded
County of San Diego Subarea Plan under the San Diego MSCP	
3A. Santa Fe Valley: Crosby Estates	5 ac (2 ha)
Subtotal County of San Diego Subarea Plan under the San Diego MSCP	*5 ac (2 ha)*
Western Riverside County MSHCP	
6D. Skunk Hollow	158 ac (64 ha)
6E. Mesa de Burro	708 ac (287 ha)
Subtotal for Western Riverside County MSHCP	*866 ac (351 ha)*
Total	871 ac (353 ha)*

*Values in this table may not sum due to rounding.

Exclusions Based on Other Relevant Factors Habitat Conservation Plans

We believe that the benefits of excluding from critical habitat portions of the essential habitat we identified within the County of San Diego Subarea Plan under the MSCP and the Western Riverside County MSHCP outweigh the benefits of including these areas; therefore, we are excluding these areas from this revised critical habitat designation. Lands covered by the Carlsbad HMP under the MHCP, and portions of the lands covered by the County of San Diego Subarea Plan under the MSCP, and the Western Riverside County MSHCP do not result in the benefits of exclusion outweighing the benefits of inclusion under section 4(b)(2) of the Act, as described in detail below.

Carlsbad Habitat Management Plan (HMP)— San Diego Multiple Habitat Conservation Program (MHCP).

We considered exclusion of a portion of essential habitat covered by the Carlsbad HMP under the MHCP for exclusion under section 4(b)(2) of the Act. The lands that were under consideration for exclusion within the City of Carlsbad include a portion of one vernal pool complex located east of the railroad tracks at the Poinsettia Lane Commuter Station. The vernal pool complex is partially on land that is covered by the Carlsbad HMP (i.e., the 3 ac (1 ha) considered for exclusion under section 4(b)(2) of the Act) and partially on land that is owned by the North County Transportation District (6 ac (2 ha)), which is not a participating entity to the Carlsbad HMP and was not considered for exclusion. We determined that the benefits of inclusion for 3 ac (1 ha) of Unit 2 lands within the Carlsbad HMP area are greater than the benefits of exclusion. In making our final decision with regard to these HMP–covered lands, we considered several factors, including our relationship with the City of Carlsbad, our relationship with other MHCP stakeholders, existing consultations, conservation measures in place on these lands that benefit *Navarretia fossalis*, implementation of long–term management strategies, and impacts to current and future

partnerships. We recognize *N. fossalis* conservation measures outlined in the Carlsbad HMP will be implemented eventually on covered lands as the plan is carried out regardless of critical habitat designation. This vernal pool complex in Unit 2 is also benefiting from conservation efforts as a result of actions associated with four other federally listed vernal pool species (i.e., San Diego fairy shrimp (*Branchinecta sandiegonensis*) and its designated critical habitat, and Riverside fairy shrimp (*Streptocephalus woottoni*) and its designated critical habitat, and *Eryngium aristulatum* var. *parishii* (San Diego button–celery), and *Orcuttia californica* (California Orcutt grass)). However, the 3 ac (1 ha) portion considered for exclusion under section 4(b)(2) of the Act is not conserved and managed for the long–term protection of the species and its habitat at this time. Once this area is conserved and managed, it will help with the long–term protection of this vernal pool complex, not only for *N. fossalis*, but also the four other federally endangered vernal pool species that already receive protection under the plan.

Protection of this vernal pool area is particularly important considering the surrounding area has already been developed. Conservation measures for lands within the Carlsbad HMP are outlined in the Carlsbad HMP biological opinion (Service 2004c, pp. 312–316). We recognize that these lands have been avoided by development associated with the Water's End housing project and have been identified as open space for the protection of the vernal pool habitat, as outlined in a consultation conducted with the Corps (Service 1994) prior to the development of the Carlsbad HMP. The developer of the Water's End project agreed to grant a conservation easement over the *Navarretia fossalis* habitat to CDFG and provide a management plan with an endowment ($100,000) to the City of Carlsbad for management and monitoring in perpetuity. Additionally, the land–owners recently completed a 5–year restoration of the upland portion of the vernal pool complex with coastal sage scrub vegetation (City of Carlsbad 2009, p. 7). However, a conservation easement has not yet been placed over the property and long–term management of the property is not yet in place. Thus, we made the determination that the benefits of inclusion outweigh the benefits of exclusion and have included all lands in this area (i.e., 9 ac (4 ha in Unit 2)) as critical habitat for *N. fossalis*. We recognize and appreciate the conservation actions taken to date at this location, such as the $100,000 provided by the Water's End project along with an additional $50,000 from the North Coast Transit District that are being held by CDFG and will be used to develop and implement long–term management to benefit vernal pool species occurring at this site, including *N. fossalis.* We look forward to working with the North Coast Transit District and CDFG in the near future to ensure that both conservation and long–term management are implemented for *N. fossalis* and its essential habitat at this location.

San Diego Multiple Species Conservation Program (MSCP)—County of San Diego Subarea Plan.

We determined approximately 86 ac (35 ha) of habitat in Subunits 3A, 5B, 5F, and 5I within the County of San Diego Subarea Plan of the MSCP contain the physical and biological features essential to the conservation of *Navarretia fossalis* that may require special management considerations or protection and therefore, these lands meet the definition of critical habitat under the Act. In making our final decision with regard to lands within the County of San Diego Subarea Plan, we considered several factors, including our relationship with the participating MSCP jurisdiction, our relationship with other MSCP stakeholders, non–covered activities, existing consultations, long–term conservation measures management in place on these lands that benefit *N. fossalis*, and impacts to current and future partnerships. We recognize *N. fossalis* conservation measures outlined in the County of San Diego Subarea Plan will be implemented as the plan is carried out regardless of whether covered areas are designated as critical habitat. Under section 4(b)(2) of the Act, we are excluding 5 ac (2 ha) of land in Subunit 3A covered by the County of San Diego Subarea Plan from this revised critical habitat designation that are currently assured of long–term conservation and management. The remaining 81 ac (33 ha) of land in Subunits 5B, 5F, and 5I covered by the County of San Diego Subarea Plan are not excluded, and we have designated these areas as critical habitat for *N. fossalis*.

The MSCP is a subregional HCP made up of several subarea plans that has been in place for more than a decade. The subregional plan area encompasses approximately 582,243 ac (235,626 ha) (County of San Diego 1997, p. 1–1; MSCP 1998, pp. 2–1, and 4–2 to 4–4) and provides for conservation of 85 federally listed and sensitive species ("covered species") through the establishment and management of approximately 171,920 ac (69,574 ha) of preserve lands within the Multi–Habitat Planning Area (MHPA) (City of San Diego) and Pre–Approved Mitigation Areas (PAMA) (County of San Diego). The MSCP was developed in support of applications for incidental take permits for several federally listed species by 12 participating jurisdictions and many other stakeholders in southwestern San Diego County. Under the umbrella of the MSCP, each of the 12 participating jurisdictions is required to prepare a subarea plan that implements the goals of the MSCP within that particular jurisdiction. *Navarretia fossalis* was evaluated in the subregional plan as well as the permitted subarea plans.

Upon completion of the plan that identifies where mitigation activities should be focused, approximately 171,920 ac (69,574 ha) of the 582,243 ac (235,626 ha) MSCP plan area will be preserved (MSCP 1998, pp. 2–1 and 4–2 to 4–4). San Diego County Subarea Plan identifies areas where mitigation activities should be focused to assemble its preserve areas (i.e., PAMA). Those areas of the MSCP preserve that are already conserved, as well as those areas that are designated for inclusion in the preserve under the plan, are referred to as the "preserve area" in this revised critical habitat designation. When the preserve is completed, the public sector (i.e., Federal, State, and local governments, and general public) will have contributed 108,750 ac (44,010 ha) (63.3 percent) to the preserve, of which 81,750 ac (33,083 ha) (48 percent) was existing public land when the MSCP was established and 27,000 ac (10,927 ha) (16 percent) will have been acquired. At completion, the private sector will have contributed 63,170 ac (25,564 ha) (37 percent) to the preserve as part of the development process, either through avoidance of impacts or as compensatory mitigation for impacts to biological resources outside the preserve. Currently and in the future, Federal and State governments, local jurisdictions, special districts, and managers of privately owned lands will manage and monitor their lands in the preserve for species and habitat protection (MSCP 1998, pp. 2–1 and 4–2 to 4–4).

We considered excluding lands within the County of San Diego Subarea Plan. After reviewing the areas covered by the County of San Diego Subarea Plan, we are excluding approximately 5 ac (2 ha) in Subunit 3A that are currently conserved and managed. The areas within the plan boundaries of the County of San Diego Subarea Plan in

Subunits 5B, 5F, and 5I were not excluded because we do not believe that the benefits of exclusion outweigh the benefits of inclusion at this time. The lands in these subunits are not currently conserved under this HCP, and non–covered activities (such as illegal OHV use) that could adversely affect *Navarretia fossalis* and its essential habitat are occurring on these lands. Therefore, we believe the conservation benefit of including these areas as critical habitat for *N. fossalis* may be significant. Additionally, portions of Subunits 5B and 5I are designated as major/minor Amendment Areas under the subarea plan and their conservation depends upon the approval of future amendments to the plan. Therefore, we did not consider these major/minor amendment areas for exclusion under section 4(b)(2) of the Act.

The County of San Diego Subarea Plan provides additional conservation for the *Navarretia fossalis* habitat in Subunit 3A (Crosby Estates) beyond what occurred when the area was initially developed and conserved (i.e., in 1995 prior to the Subarea Plan development). Subunit 3A consists of 5 ac (2 ha) of private land within the northern portion of the County of San Diego Subarea Plan. This area was set aside in 1995 when the surrounding area was developed, and the vernal pool habitat area was restored and managed for a 5–year period to ensure the conservation of *N. fossalis* and other vernal pool species. Under the County of San Diego Subarea Plan, the area will continue to receive periodic monitoring beyond the initial 5–year period. The long–term management requirements applicable for this area are explained in the "The Crosby at Rancho Santa Fe, Habitat Management Plan, Annual Report, 2008" (Rincon Consultants, Inc. 2008, pp. 1–6). Such management will include monitoring and management of invasive species, implementing erosion control measures, monitoring and removal of trash/debris, creating natural fencing barriers to address unauthorized off–trail activity, installing signage, and developing educational website and materials (Rincon Consultants, Inc. 2008, pp. 4–15).

Benefits of Inclusion—County of San Diego Subarea Plan

The principle benefit of including an area in a critical habitat designation is the requirement of Federal agencies to ensure actions they fund, authorize, or carry out are not likely to result in the destruction or adverse modification of any designated critical habitat, the regulatory standard of section 7 of the Act under which consultation is completed. Federal agencies must consult with the Service on actions that may affect critical habitat and must avoid destroying or adversely modifying critical habitat. Federal agencies must also consult with us on actions that may affect a listed species and refrain from undertaking actions that are likely to jeopardize the continued existence of such species. The analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. Therefore, the difference in outcomes of these two analyses represents the regulatory benefit of critical habitat. For some species (including *Navarretia fossalis*), and in some locations, the outcome of these analyses will be similar, because effects to habitat will often also result in effects to the species. However, the regulatory standard is different, as the jeopardy analysis investigates the action's impact to survival and recovery of the species, while the adverse modification analysis investigates the action's effects to the designated habitat's contribution to conservation. This will, in many instances, lead to different results and different regulatory requirements. Thus, critical habitat designations may provide greater benefits to the recovery of a species than would listing alone.

Critical habitat may provide a regulatory benefit for *Navarretia fossalis* when there is a Federal nexus present for a project that might adversely modify critical habitat. Also, where federally listed animal species, such as the Riverside fairy shrimp or San Diego fairy shrimp co–occur with *N. fossalis* and are likely to be taken by a proposed action that otherwise lacks a Federal nexus, the project proponent would be required to obtain an incidental take permit under section 10 of the Act, thus resulting an intra–Service section 7 consultation that would also include *N. fossalis*. In the areas that we considered for exclusion within the County of San Diego Subarea Plan, Riverside fairy shrimp or San Diego fairy shrimp are present in Subunits 3A, 5F, and 5I. In this context, we anticipate that projects that meet the definition of critical habitat within Subunits 3A, 5F, and 5I will require a consultation with the Service regardless of whether critical habitat is designated. It is possible that in Subunit 5B (where no federally listed fairy shrimp are known to exist) the designation of critical habitat will result in an increase in the likelihood that consultations with the Service will occur. It is also possible that the number of consultations that occur in the local watershed areas of Subunits 5F and 5I would increase by approximately 20 percent as a result of critical habitat designation for *N. fossalis* within the non–ponded/watershed areas (Service 2009, p. 2). Therefore, for Subunit 5B and to a certain extent Subunits 5F and 5I, it is probable that conservation achieved under the Act would increase if the areas are designated as critical habitat for *N. fossalis*, resulting in a small regulatory benefit associated with the designation of critical habitat in these subunits.

When consulting under section 7 of the Act in designated critical habitat, we conduct independent analyses for jeopardy and adverse modification. However, with regard to vernal pool species such as *Navarretia fossalis*, the outcomes of those analyses (in terms of potential restrictions on development) are almost always the same. In general, a properly functioning hydrologic regime is critical to sustain listed vernal pool species and their immediate vernal pool habitat (i.e., local watershed). Avoidance or adequate minimization of impacts to the wetland area and its associated watershed (which collectively creates the hydrologic regime necessary to support *N. fossalis*) is important not only to enable the critical habitat unit to carry out its conservation function (i.e., to avoid adverse modification), but also to avoid jeopardy to the listed species. *Navarretia fossalis* is completely dependent on a properly functioning vernal pool system for its survival; therefore, it is not possible to differentiate conservation measures needed to avoid adverse modification of critical habitat from those needed to avoid jeopardy to the species. Impacts to both wetland features where *N. fossalis* occurs and to the associated local watershed necessary to maintain those wetland features should generally be avoided to prevent jeopardy to *N. fossalis* or to prevent adverse modification to *N. fossalis* critical habitat. Service biologists regularly negotiate with project proponents to avoid impacts to vernal pool and ephemeral wetland habitat. Whenever possible; these negotiations include conservation measures that would avoid impacts to both the pools and the associated local watershed area. Therefore, we do not believe conservation achieved under the Act would differ greatly whether or not the areas are designated as critical habitat for *N. fossalis*. However, while the outcome of individual section 7 consultation may not differ, we believe designation of lands in Subunits 5B, 5F, and 5I as critical habitat may provide a small regulatory benefit by increasing

the likelihood and number of consultations in these areas and thereby increase the overall level of conservation for *N. fossalis*.

Another possible benefit of including lands in a critical habitat designation is the educational value of the designation to landowners and the public regarding the potential conservation value of an area. For example, a critical habitat designation for *Navarretia fossalis* may help local governments or the public focus conservation efforts on areas of high conservation value for this species. Past efforts have highlighted the importance of the essential habitat for *N. fossalis* within the jurisdiction of the County of San Diego Subarea Plan. These past efforts include public meetings and opportunities for public comment that occurred during the process of creating the HCP, the development of the Habitat Management Plan for the Crosby at Rancho Santa Fe, and development of our Recovery Plan for Southern California Vernal Pool Species (Service 1998). While these efforts have helped to identify important conservation areas for *N. fossalis* in the County of San Diego Subarea Plan, some of these areas (i.e., Subunits 5B, 5F, and 5I) still suffer impacts from activities such as grazing on non–agricultural lands (an activity covered by the plan), and illegal off–highway vehicle (OHV) use. By designating critical habitat in these areas that continue to receive impacts, we will better educate the public regarding these and other threats to *N. fossalis* and the physical and biological features essential to the conservation of the species. The educational information provided in this revised rule and the 2005 final rule (70 FR 60658; October 18, 2005) can be used by the public to learn about *N. fossalis* priority conservation areas. The inclusion in revised critical habitat of the approximately 81 ac (33 ha) of lands in subunits 5B, 5F, and 5I that are not currently protected and managed would formally identify these areas as essential for the conservation and recovery of *N. fossalis* and in doing so provide a significant educational benefit to the conservation of *N. fossalis*. In contrast, we believe the educational benefit of designating Subunit 3A would be insignificant because this area is already conserved.

We considered that the designation of critical habitat for *Navarretia fossalis* may strengthen or reinforce some of the provisions in other State and Federal laws, such as the California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA). These laws analyze the potential for projects to significantly affect aspects of the environment. In this case for *N. fossalis*, vernal pools and vernal pool species have been a focus of conservation in San Diego County for more than 20 years and have been addressed in CEQA and NEPA throughout this time period; therefore, we do not believe designation of critical habitat for *N. fossalis* will provide a significant additional benefit to analyses conducted under these laws.

In summary, we believe designating Subunits 3A, 5B, 5F, and 5I as revised critical habitat may provide some regulatory benefits under section 7 of the Act, particularly in Subunits 5B, 5F, and 5I, where designation may increase the likelihood and number of consultations and thus the overall level of conservation for this species and its essential habitat, but we do not believe that the outcome of these consultations will change greatly with the designation of critical habitat. Additionally, we believe that there may be a significant benefit associated with the designation of critical habitat due to the educational component provided by critical habitat in areas that are not currently conserved; specifically, we believe that these benefits are significant in Subunits 5B, 5F, and 5I.

Benefits of Exclusion—County of San Diego Subarea Plan

We believe significant benefits would be realized by forgoing designation of critical habitat on lands covered by the County of San Diego Subarea Plan including:

(1) Continuance and strengthening of our effective working relationships with all MSCP jurisdictions and stakeholders to promote conservation of *Navarretia fossalis* and its habitat;

(2) Allowance for continued meaningful collaboration and cooperation in working toward recovering this species, including conservation benefits that might not otherwise occur;

(3) Encouragement for other jurisdictions to complete subarea plans under the MSCP (including the City of Santee); and

(4) Encouragement of additional HCP and other conservation plan development in the future on other private lands for this and other federally listed and sensitive species.

The County of San Diego Subarea Plan provides substantial protection and management for *Navarretia fossalis* and the physical and biological features essential to the conservation of the species, and addresses conservation issues from a coordinated, integrated perspective rather than a piecemeal, project–by–project approach (as would occur under sections 7 and 9 of the Act). Many landowners perceive critical habitat as an unfair and unnecessary regulatory burden given the expense and time involved in developing and implementing complex regional and jurisdiction–wide HCPs, such as the MSCP. Exclusion of these lands from critical habitat could help preserve the partnerships we developed with the County of San Diego in the development of the MSCP and County of San Diego Subarea Plan, and foster future partnerships and development of future HCPs.

The primary benefit of excluding lands owned by or under the jurisdiction of the County of San Diego Subarea Plan permittees from critical habitat under the MSCP is strengthening of our existing partnership with the County of San Diego. The County of San Diego requested that we exclude lands covered by their subarea plan during the public comment period. If the County of San Diego believes that a revised critical habitat designation will impact its ability to implement their subarea plan, then designating County of San Diego lands may affect our partnership with them.

In summary, we believe that excluding lands covered by the County of San Diego Subarea Plan from critical habitat provides the significant benefit of maintaining existing regional HCP partnerships and fostering new ones.

Weighing Benefits of Exclusion Against Benefits of Inclusion—County of San Diego Subarea Plan

We reviewed and evaluated the benefits of inclusion and benefits of exclusion for all lands within the County of San Diego Subarea Plan under the MSCP proposed as critical habitat for *Navarretia fossalis*. The benefits of including lands currently conserved under the MSCP in the critical habitat designation are small. All of the approximately 5 ac (2 ha) of land in Subunit 3A are already conserved and managed for the preservation of vernal pool species, including *N. fossalis*. Therefore, designating this area as critical habitat is unlikely to provide significant regulatory or educational benefits. This area is currently being managed under a habitat management plan developed in part because the area is covered by the County of San Diego Subarea Plan. The exclusion of conserved areas of Subunit 3A will benefit the partnership that we have with the County of San Diego and encourage the conservation of lands associated with the development and implementation of future HCPs.

Including lands in Subunits 5B, 5F, and 5I in the critical habitat designation for *Navarretia fossalis* that are not currently conserved or protected from activities such as illegal OHV use and unregulated grazing in critical habitat will provide additional regulatory protection for *N. fossalis* and its essential habitat under section 7(a) of the Act when there is a Federal nexus, and designation will act as an educational tool for the public regarding the conservation of *N. fossalis.* Therefore, designating these areas as critical habitat for *N. fossalis* is likely to provide additional regulatory benefits as well as a significant educational benefit to the species. We believe that excluding these areas under section 4(b)(2) of the Act would provide a significant benefit to the partnership that we have with the County of San Diego, but we believe that the conservation benefits of including these lands as critical habitat outweighs the benefit of exclusion.

In summary, we find that the benefits of excluding lands in areas that are conserved and managed for the purpose of protecting *Navarretia fossalis* (Subunit 3A) outweigh the benefits of including those lands as critical habitat for *N. fossalis*. We find that the benefits of including lands that are being impacted by activities covered under the County of San Diego Subarea Plan and are not yet conserved and managed (Subunits 5B, 5F, and 5I) outweigh the benefits of excluding those lands as critical habitat for *N. fossalis*.

Exclusion Will Not Result in Extinction of the Species—County of San Diego Subarea Plan

We determined that the exclusion of approximately 5 ac (2 ha) of habitat in Subunit 3A within the County of San Diego Subarea Plan from the revised designation of critical habitat for *Navarretia fossalis* will not result in extinction of the species. The County of San Diego Subarea Plan and "The Crosby at Rancho Santa Fe Habitat Management Plan" provide protection and long–term management of lands that meet the definition of critical habitat for *N. fossalis* in Subunit 3A. Additionally, the jeopardy standard of section 7 of the Act for *N. fossalis* in Subunit 3A provides assurances that the species will not go extinct as a result of exclusion from critical habitat designation. The consultation requirements of section 7(a)(2) and the attendant requirement to avoid jeopardy to *N. fossalis* for projects with a Federal nexus will provide significant protection to the species. Therefore, based on the above discussion we are excluding approximately 5 ac (2 ha) of habitat in Subunit 3A within the County of San Diego Subarea Plan from this revised critical habitat designation.

Western Riverside County Multiple Species Habitat Conservation Plan (Western Riverside County MSHCP)

We determined that approximately 6,343 ac (2,567 ha) of land owned by or under the jurisdiction of the permittees of the Western Riverside County MSHCP contain the physical and biological features essential to the conservation of *Navarretia fossalis* that may require special management considerations or protection, and therefore, these lands meet the definition of critical habitat under the Act. In making our final decision with regard to these lands, we considered several factors including our relationships with participating jurisdictions, our relationships with other stakeholders, existing consultations, conservation measures and management in place on these lands that benefit *N. fossalis*, and impacts to current and future partnerships. We recognize *N. fossalis* conservation measures outlined in the Western Riverside County MSHCP will be implemented as the plan is carried out regardless if covered areas are designated as revised critical habitat. Under section 4(b)(2) of the Act, we are excluding 866 ac (351 ha) of land meeting the definition of critical habitat owned by or under the jurisdiction of the Western Riverside County MSHCP permittees within Unit 6 (Subunits 6D and 6E) from this revised critical habitat designation. We are including 5,477 ac (2,217 ha) of land that meets the definition of critical habitat owned by or under the jurisdiction of Western Riverside County MSHCP permittees within Unit 6 (Subunits 6A, 6B, and 6C) in this revised critical habitat designation. As described in our section 4(b)(2) analysis below, we reached this determination in consideration of the benefits associated with the designation of each area in revised critical habitat balanced against the benefits of excluding the area in the final critical habitat designation, including such factors as (but not limited to) the existence of co–occurring listed species (such as the San Diego and Riverside fairy shrimp species) resulting in redundant conservation measures, implementation of conservation measures, and non–covered activities.

The Western Riverside County MSHCP is a large–scale, multi–jurisdictional HCP encompassing approximately 1.26 million ac (510,000 ha) of land in western Riverside County. The Western Riverside County MSHCP addresses 146 listed and unlisted "covered species," including *Navarretia fossalis*. Participants in the Western Riverside County MSHCP include 14 cities; the County of Riverside, including the Riverside County Flood Control and Water Conservation Agency (County Flood Control), Riverside County Transportation Commission, Riverside County Parks and Open Space District, and Riverside County Waste Department; California Department of Parks and Recreation; and the California Department of Transportation. The Western Riverside County MSHCP is a multi–species conservation program that minimizes and mitigates the expected loss of habitat and associated incidental take of covered species. On June 22, 2004, the Service issued a single incidental take permit (Service 2004b, TE–088609–0) under section 10(a)(1)(B) of the Act to 22 permittees under the Western Riverside County MSHCP for a period of 75 years.

The Western Riverside County MSHCP will establish approximately 153,000 ac (61,917 ha) of new conservation lands (Additional Reserve Lands) to complement the approximate 347,000 ac (140,426 ha) of pre–existing natural and open space areas (Public/Quasi–Public (PQP) lands) in the plan area. These PQP lands include those under Federal ownership, primarily managed by the United States Forest Service (USFS) and Bureau of Land Management (BLM), and also permittee–owned or controlled open–space areas, primarily managed by the State and Riverside County. Collectively, the Additional Reserve Lands and PQP lands form the overall Western Riverside County MSHCP Conservation Area. The configuration of the 153,000 ac (61,916 ha) of Additional Reserve Lands is not mapped or precisely identified ("hard–lined") in the Western Riverside County MSHCP. Rather, it is based on textual descriptions of habitat conservation necessary to meet the conservation goals for all covered species within the bounds of the approximately 310,000 ac (125,453 ha) Criteria Area and is interpreted as implementation of the Western Riverside County MSHCP takes place.

Specific conservation objectives in the Western Riverside County MSHCP for *Navarretia fossalis* include providing 6,900 ac (2,792 ha) of occupied or suitable habitat for the species in the MSHCP Conservation Area. This acreage goal can be attained through acquisition or other dedications of land assembled from within the Criteria Area (i.e., the Additional Reserve Lands) or Narrow Endemic Plan Species Survey Area and

through coordinated management of existing PQP lands. We internally mapped a "Conceptual Reserve Design," which illustrates existing PQP lands and predicts the geographic distribution of the Additional Reserve Lands based on our interpretation of the textual descriptions of habitat conservation necessary to meet conservation goals. Our Conceptual Reserve Design was intended to predict one possible future configuration of the eventual approximately 153,000 ac (61,916 ha) of Additional Reserve Lands. The Western Riverside County MSHCP states that at least 6,900 ac (2,792 ha) of vernal pool and playa habitat suitable for *N. fossalis* within the San Jacinto River, Mystic Lake, and Salt Creek areas will be included within the MSHCP Conservation Area (Service 2004b, p. 376; FWS–WRIV–870.19).

Preservation and management of approximately 6,900 ac (2,792 ha) of *Navarretia fossalis* habitat under the Western Riverside County MSHCP will contribute to the conservation and ultimate recovery of this species. *Navarretia fossalis* is threatened primarily by agricultural activities, development, manure dumping (Roberts 2009, pp. 2–14), and fuel modification actions within the plan area (Service 2004b, pp. 369–378). The Western Riverside County MSHCP will remove and reduce threats to *N. fossalis* and the physical and biological features essential to the conservation of the species as the plan is implemented by placing large blocks of occupied and unoccupied habitat into preservation throughout the Conservation Area. Areas identified for preservation and conservation include 13 of the known locations of the species at Skunk Hollow, the Santa Rosa Plateau, the San Jacinto Wildlife Area, floodplains of the San Jacinto River from the Ramona Expressway to Railroad Canyon, and upper Salt Creek west of Hemet.

The Western Riverside County MSHCP Conservation Area will maintain floodplain processes along the San Jacinto River and along Salt Creek to provide for the distribution of *Navarretia fossalis* to shift over time as hydrologic conditions and seed bank sources change. Additionally, the Western Riverside County MSHCP requires surveys for *N. fossalis* as part of the project review process for public and private projects where suitable habitat is present within a defined narrow endemic species survey area (see Narrow Endemic Species Survey Area Map, Figure 6–1 of the Western Riverside County MSHCP, Volume I, in Dudek 2003). For locations with positive survey results for *N. fossalis*, 90 percent of those portions of the property that provide long–term conservation value for the species will be avoided until it is demonstrated that the conservation objectives for the species are met. Once the objectives are met, avoided areas would be evaluated to determine whether they should be released for development or included in the MSHCP Conservation Area (see Protection of Narrow Endemic Plant Species; Western Riverside County MSHCP, Volume 1, section 6.1.3, in Dudek and Associates, Inc. 2003).

The survey requirements, avoidance and minimization measures, and management for *Navarretia fossalis* and its PCEs provided for in the Western Riverside County MSHCP are expected to benefit this species on public and private lands covered by the plan. We determined that approximately 6,343 ac (2,567 ha) of private and permittee–owned or controlled PQP lands in Unit 6 (Subunits 6A through 6E), within the Western Riverside County MSHCP Plan Area, meet the definition of critical habitat for *N. fossalis*. Projects in areas meeting the definition of critical habitat for *N. fossalis* conducted or approved by Western Riverside County MSHCP permittees are subject to the conservation requirements of the MSHCP. For projects that may impact *N. fossalis*, various HCP policies (i.e., Narrow Endemic Plant Species Policy, and the Riparian/Riverine and Vernal Pool Policy in Dudek and Associates, Inc. 2003) provide additional conservation requirements.

The Western Riverside County MSHCP incorporates several processes that allow for Service oversight and participation in program implementation. These processes include:

(1) Consultation with the Service on a long–term management and monitoring plan;

(2) Submission of annual monitoring reports;

(3) Annual status meetings with the Service; and

(4) Submission of annual implementation reports to the Service (Service 2004b, pp. 9–10).

Below, we provide a brief analysis of the lands in Unit 6 that we are excluding under section 4(b)(2) of the Act and lands we are including in the revised critical habitat designation, and how each area is covered by the Western Riverside County MSHCP or other conservation measures.

Two of the subunits, Subunit 6D (Skunk Hollow) and Subunit 6E (Mesa de Burro), consist of lands that are managed and already in permanent conservation. The majority of Subunit 6D was conserved as a result of the Rancho Bella Vista HCP (Rancho Bella Vista 1999, p. 2; CNLM 2009a, p. 1) and the remainder of the land in Subunit 6D was conserved as a result of the Assessment District 161 HCP (CNLM 2009b, p. 1), both HCPs of which were incorporated into the larger, subregional Western Riverside County MSHCP upon its completion. In total, 100 percent of the lands in Subunit 6D are conserved and managed specifically for the purpose of preserving the vernal pool habitat. Subunit 6E is conserved as part of the Santa Rosa Plateau Ecological Reserve. This Reserve has four landowners: the CDFG, the County of Riverside, the Metropolitan Water District of Southern California, and The Nature Conservancy. The landowners and the Service (which owns no land on the Plateau) signed a cooperative management agreement on April 16, 1991 (Dangermond and Associates, Inc. 1991), and meet regularly to implement management of the Reserve (Riverside County Parks 2009, p. 2). The vernal pools within Subunit 6E are managed and monitored to preserve the unique vernal pool plants and animals that occur on the Santa Rosa Plateau.

The other three units (Subunit 6A, 6B, and 6C) are not conserved or managed for *Navarretia fossalis* at this time; however, as the Western Riverside County MSHCP is implemented, we believe that additional areas in these subunits may be conserved. Subunit 6A is 99 percent within the Narrow Endemic Plant Species Survey Area (NEPSSA), and Subunits 6B and 6C are entirely within the NEPSSA. Therefore, biological surveys for *N. fossalis* will occur prior to development of any suitable habitat within these subunits. Furthermore, Subunits 6A and 6B have additional protections in place either from past conservation efforts (such as the establishment of the San Jacinto Wildlife Area and the Metropolitan Water District Upper Salt Creek Wetland Preserve), or through additional project review requirements within the Criteria Area (Joint Project/Acquisition Review Process as described in the Western Riverside County MSHCP (Service 2004b, pp. 23, 25; Western Riverside County MSHCP, Volume 1, section 6.6.2 in Dudek and Associates, Inc. 2003, pp. 6–82–6–84)). We anticipate that these areas will receive management that would benefit *N. fossalis* at some point in the near future; however, at this time these areas do not receive active management that would benefit *N. fossalis,* as described further below.

A large portion of Subunit 6A (1,504 ac (609 ha), or approximately 35 percent) is within the San Jacinto

Wildlife Area, a wildlife area owned and operated by CDFG. This area consists of restored wetlands that provide habitat for waterfowl and wading birds, and seasonally flooded vernal plain habitat along the San Jacinto River north of the Ramona Expressway that supports *Navarretia fossalis*. Though conserved from development, the CDFG has not implemented a management plan that is beneficial to *N. fossalis* (E. Konno, CDFG Biologist, pers. comm. 2010) . In addition to the portion of Subunit 6A owned by CDFG, 68 percent (2,919 ac (1,181 ha)) of the remaining land is within the Criteria Area. Projects in this area will be implemented through the Joint Project Review Process to ensure that the requirements of the MSHCP permit and the Implementing Agreement are properly met (Western Riverside County MSHCP, Volume 1, section 6.6.2 in Dudek and Associates, Inc. 2003, p. 6–82); however, these areas are not currently conserved and managed to benefit *N. fossalis*.

The majority of Subunit 6B is within the Criteria Area (56 percent; 525 ac (212 ha) out of a total 943 ac (382 ha)) and projects in this area will be implemented through the Joint Project Review Process. A portion of this subunit is in the area referred to as West Hemet, which is under the jurisdiction of the City of Hemet. Although the West Hemet area is not conserved, the City is actively working on addressing issues on sensitive vernal pool resources (such as updating the general plan), and recently implemented an ordinance against manure dumping, which is a threat to the species in this subunit (see the **Special Management Considerations and Protection** section).

Subunit 6C is not within the Criteria Area for the Western Riverside County MSHCP; however, impacts to the pools in this subunit should be avoided, minimized, or offset through implementation of the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools guidelines and NEPSSA guidelines. For example, the NEPSSA guidelines include protection measures that require surveys in suitable habitat for narrow endemic species in an attempt to find areas that should be considered as priorities for Western Riverside County MSHCP Conservation Area acquisition (Western Riverside County MSHCP, Volume 1, section 6.0 in Dudek and Associates, Inc. 2003). Additionally, for populations identified in NEPSSA surveys, impacts to 90 percent of those portions of the property that provide for long–term conservation value of the identified Narrow Endemic Plant Species shall be avoided until it is demonstrated that Conservation goals for the particular species are met (Western Riverside County MSHCP, Volume 1, section 6.1.3 in Dudek and Associates, Inc. 2003, p. 6–39). The Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools guidelines require assessments of potentially significant project effects as required by CEQA (Western Riverside County MSHCP, Volume 1, section 6.1.2 in Dudek and Associates, Inc. 2003, p. 6–20).

The Benefits of Inclusion—Western Riverside County MSHCP

The principle benefit of including an area in a critical habitat designation is the requirement of Federal agencies to ensure actions they fund, authorize, or carry out are not likely to result in the destruction or adverse modification of any designated critical habitat, the regulatory standard of section 7(a)(2) of the Act under which consultation is completed. Federal agencies must consult with the Service on actions that may affect critical habitat and must avoid destroying or adversely modifying critical habitat. Federal agencies must also consult with us on actions that may affect a listed species and refrain from undertaking actions that are likely to jeopardize the continued existence of such species. The analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. Therefore, the difference in outcomes of these two analyses represents the regulatory benefit of critical habitat. For some species (including *Navarretia fossalis*), and in some locations, the outcome of these analyses will be similar, because effects to habitat will often also result in effects to the species. However, the regulatory standard is different, as the jeopardy analysis investigates the action's impact to survival and recovery of the species, while the adverse modification analysis investigates the action's effects to the designated habitat's contribution to conservation. This will, in many instances, lead to different results and different regulatory requirements. Thus, critical habitat designations may provide greater benefits to the recovery of a species than would listing alone.

Federal agencies must consult with us on actions that may affect critical habitat and must avoid destroying or adversely modifying critical habitat. Critical habitat may provide a regulatory benefit for *Navarretia fossalis* when there is a Federal nexus present for a project that might adversely modify critical habitat. However, all of the approximately 866 ac (351 ha) of land we are excluding within Units 6 (Subunits 6D and 6E) are protected open space or on private property, with no expected Federal nexus, including no areas connected to navigable waters that would typically result in a U.S. Army Corps of Engineers' Federal nexus. For *N. fossalis* critical habitat where no federally listed fairy shrimp occur, we believe it is unlikely there will be Federal nexus because projects that will adversely modify critical habitat should not occur in areas conserved under the Western Riverside County MSHCP, and the U.S. Army Corps of Engineers (Corps) typically does not assume jurisdiction under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) when vernal pool complexes are not hydrologically connected to navigable waters of the United States. Furthermore, two federally listed fairy shrimp species, Riverside fairy shrimp and vernal pool fairy shrimp (*Branchinecta lynchii*), are also present in some of the vernal pool habitat managed under the Western Riverside County MSHCP, and the terms and conditions of the biological opinion (USFWS 2004b, pp. 11441153) would also conserve *N. fossalis*. Therefore, we believe there will be indirect benefits to *N. fossalis* in excluded areas covered by the Western Riverside County MSHCP based on conservation actions achieved under the Act in habitat also occupied by a federally listed fairy shrimp species.

The consultation provisions under section 7(a) of the Act constitute the regulatory benefits of designating lands as critical habitat. As discussed above, Federal agencies must consult with us on actions that may affect critical habitat and must avoid destroying or adversely modifying critical habitat. Critical habitat may provide a regulatory benefit for *Navarretia fossalis* when there is a Federal nexus present for a project that might adversely modify critical habitat. Specifically, we expect projects along the San Jacinto River would require a 404 permit under the Clean Water Act from the Corps. Therefore, critical habitat designation in Subunits 6A, 6B, and 6C will provide an additional regulatory benefit to the conservation of *N. fossalis* by prohibiting adverse modification of habitat essential for the conservation of this species.

As discussed above, the Western Riverside County MSHCP mandates protection of *Navarretia fossalis* habitat considered necessary for survival and recovery of the species. For locations with positive survey results, impacts to 90 percent of portions of the property that provide long–term conservation

value for the species will be avoided (referring to the ephemeral wetland habitat that supports *N. fossalis* and the local watershed area that allows the ephemeral wetland habitat to function properly) until it is demonstrated that the conservation objectives for the species have been met (see Protection of Narrow Endemic Plant Species; Western Riverside County MSHCP, Volume 1, section 6.1.3, in Dudek and Associates, Inc. 2003). However, the MSHCP does not prohibit manure dumping and other soil amendments in habitat that has not yet been conserved. As discussed in Comments 6, 13, and 22 below, this threat is significant and ongoing within the Western Riverside County MSHCP plan area (specifically in Subunits 6A, 6B, and 6C) in habitat that has not been conserved and managed to benefit the species. Manure dumping is not a covered activity under the plan. Therefore, for activities covered under the plan, we believe that protections provided by the designation of critical habitat will be partially redundant with protections provided by the HCP; however, additional regulatory protection from manure dumping and other soil amendments is needed in Subunits 6A, 6B, and 6C.

Local ordinances may address activities not covered by an HCP that impact threatened or endangered species, particularly if they accompany permanent conservation and management of an area. For example, the City of Hemet enacted local Ordinance No. 1666 on April 9, 2002, to control the practice of dumping manure on biologically sensitive sites such as the vernal pool complex along Salt Creek (Subunit 6B). Although Ordinance No. 1666 provides an added level of protection above and beyond that provided by the Western Riverside County MSHCP (because manure dumping is not a covered activity under the Western Riverside County MSHCP), and complements the regulatory protection that would be provided by critical habitat designation, these lands are not yet conserved and managed for *N. fossalis*.

Another possible benefit of including lands in critical habitat is public education regarding the potential conservation value of an area that may help focus conservation efforts on areas of high conservation value for certain species. Any information about *Navarretia fossalis* and its habitat that reaches a wide audience, including parties engaged in conservation activities, is valuable. The inclusion of lands in the *N. fossalis* critical habitat designation that are owned by or under the jurisdiction of the permittees of the Western Riverside County MSHCP could be beneficial to the species because while the plan establishes conservation goals for *N. fossalis* and identifies criteria for identifying habitat to be conserved, the critical habitat designation specifically identifies those lands essential to the conservation of the species and which may require special management considerations or protection. The process of proposing revised critical habitat provided an opportunity for peer review and public comment on habitat we determined meets the definition of critical habitat. This process is valuable to land owners and managers in prioritizing conservation and management of identified areas. Information on *N. fossalis* and its habitat also has been provided to the public in the past, through meetings, educational materials provided by the County of Riverside, and recommendations provided in our Recovery Plan for Southern California Vernal Pool Species (Service 1998). In general, we believe the designation of critical habitat for *N. fossalis* will provide additional information for the public concerning the importance of essential habitat in Subunits 6A, 6B, and 6C that has not already been available.

The benefit of educating the public about *Navarretia fossalis* habitat is significant because the distribution of vernal pool and alkali playa habitat in Riverside County is not well known and the importance of these habitat areas may not be known to the public. Activities that harm habitat where *N. fossalis* occurs (including the associated local watershed areas) are taking place in Riverside County possibly due to the lack of public awareness. For example, manure dumping on private property along the San Jacinto River and in the vicinity of the Wicker Road Pool is adversely affecting habitat within the Western Riverside County MSHCP plan area (Roberts 2009, pp. 2–14). We have been working with permittees to implement ordinances that will help to control activities (such as manure dumping) that may impact the implementation of the Western Riverside County MSHCP conservation objectives. To date, the City of Hemet is the only Western Riverside County MSHCP permittee that has addressed the negative impacts (alters the physical and biological features essential to the conservation of *N. fossalis*) that manure dumping has on *N. fossalis* and its habitat through the enactment of Ordinance 1666 (i.e., the ordinance that prevents manure dumping activities, thereby educating its citizens and reducing the educational benefits of including this land as critical habitat). We believe including areas in the *N. fossalis* revised critical habitat designation where manure dumping still occurs on non–conserved and non–managed lands will provide information to the public and local jurisdictions regarding the importance of addressing this threat throughout the areas where manure dumping occurs. Therefore, we believe there is an overall significant educational conservation benefit of critical habitat designation of essential habitat within Subunits 6A, 6B and 6C in the Western Riverside County MSHCP because designation will specifically identify for the public and plan participants those areas essential for conservation of the species that are not currently protected and managed under the plan, and particularly for areas outside of the City of Hemet where Ordinance 1666 has been enacted, will help educate the public about the threats to these areas posed by manure dumping.

The designation of *Navarretia fossalis* critical habitat may also strengthen or reinforce some of the provisions in other State and Federal laws, such as CEQA or NEPA. These laws analyze the potential for projects to significantly affect the environment. In Riverside County, the additional protections associated with critical habitat may be beneficial in areas not currently conserved. Critical habitat may signal the presence of habitat that is not conserved or protected that could otherwise be missed in the review process for these other environmental laws.

In summary, we believe that designating critical habitat is unlikely to provide regulatory benefits under the Act in essential habitat areas that are currently conserved and managed. In areas that are not currently conserved and managed, we believe that there are significant regulatory and educational benefits that would result from critical habitat designation. The educational benefits of designation are somewhat reduced in the non-conserved portion of Subunit 6B within the City of Hemit where an ordinance exists to protect *N. fossalis* habitat from manure dumping.

Benefits of Exclusion—Western Riverside County MSHCP

We believe benefits would be realized by forgoing designation of critical habitat for *Navarretia fossalis* on lands covered by the Western Riverside County MSHCP including:

(1) Continuance and strengthening of our effective working relationships with all Western Riverside County MSHCP

jurisdictions and stakeholders to promote conservation of *N. fossalis* and its habitat;

(2) Allowance for continued meaningful collaboration and cooperation in working toward recovering this species, including conservation benefits that might not otherwise occur;

(3) Encouragement for local jurisdictions to fully participate in the Western Riverside County MSHCP; and

(4) Encouragement of additional HCP and other conservation plan development in the future on other private lands for this and other federally listed and sensitive species.

The Western Riverside County MSHCP provides substantial protection and management for *Navarretia fossalis* and the physical and biological features essential to the conservation of the species, and addresses conservation issues from a coordinated, integrated perspective rather than a piecemeal, project-by-project approach (as would occur under sections 7 and 9 of the Act or smaller HCPs). Many landowners perceive critical habitat as an unfair and unnecessary regulatory burden given the expense and time involved in developing and implementing complex regional and jurisdiction-wide HCPs, such as the Western Riverside County MSHCP (as discussed further in Comment 22 below in the **Summary of Comments and Recommendations** section of this rule). Exclusion of the Western Riverside County MSHCP lands from critical habitat would help preserve the partnerships we developed with the County of Riverside, the City of Hemet, and other local jurisdictions in the development of the Western Riverside County MSHCP, and foster future partnerships and development of future HCPs.

In summary, we believe excluding land covered by the Western Riverside County MSHCP from critical habitat could provide the significant benefit of maintaining existing regional HCP partnerships and fostering new ones.

Weighing Benefits of Exclusion Against Benefits of Inclusion—Western Riverside County MSHCP

We reviewed and evaluated the benefits of inclusion and benefits of exclusion for all lands owned by or under the jurisdiction of Western Riverside County MSHCP permittees as critical habitat for *Navarretia fossalis*. The benefits of including conserved and managed lands in the critical habitat designation are small. All of the approximately 158 ac (64 ha) of land in Subunit 6D at Skunk Hollow and all of the approximately 708 ac (287 ha) of land in Subunit 6E at Mesa de Burro are already managed and conserved, and provide a benefit to *N. fossalis*. It is also unlikely that a project with a Federal nexus will occur in Subunits 6D, and 6E; therefore, designating these areas as critical habitat is unlikely to provide significant regulatory benefit.

Additionally, the educational benefits of critical habitat designation and the potential benefits designation may confer under other statutes (such as CEQA and NEPA) are also small in Subunits 6D and 6E because these areas are already conserved and managed in perpetuity. Therefore, designation of *N. fossalis* critical habitat in Subunits 6D or 6E will not provide a substantial educational benefit.

In summary, we find that excluding lands from critical habitat in areas that are receiving long-term conservation and management for the purpose of protecting *Navarretia fossalis* (Subunits 6D and 6E) will help preserve our partnership with the County of Riverside and other permittees in the Western Riverside County MSHCP and encourage the conservation of lands associated with development and implementation of future HCPs. These partnership benefits are significant and outweigh the small potential regulatory and educational benefits of including these already conserved and managed lands as critical habitat for *N. fossalis*. With regards to lands within the City of Hemet, we acknowledge the City's proactive efforts to protect *N. fossalis* through enactment of Ordinance 1666 prohibiting manure dumping in essential *N. fossalis* habitat. This effort somewhat reduces the regulatory and educational benefits of designation of that portion of Subunit 6B within the City of Hemit. However, these lands are not receiving long-term conservation and management to benefit *N. fossalis*. We find that including City of Hemet lands (Subunit 6B) and other non-conserved and non-managed lands within the Western Riverside County MSHCP (Subunits 6A and 6C) as critical habitat outweigh the benefits of exclusion. We believe that critical habitat designation in these areas will provide additional regulatory protection under section 7(a) of the Act when there is a Federal nexus, and act as an educational tool for the public to lead to conservation and management of *N. fossalis* and its essential habitat. Therefore, designating these areas as critical habitat for *N. fossalis* is likely to provide a regulatory as well as educational benefit to the species. While we acknowledge that excluding these areas under section 4(b)(2) of the Act would provide a significant benefit to the partnership that we have with the Western Riverside County MSHCP permittees (including the City of Hemet), we believe that the conservation value of including these non-conserved, non-managed lands as critical habitat outweighs the benefit of exclusion.

Exclusion Will Not Result in Extinction of the Species—Subunits 6D and 6E, Western Riverside County MSHCP

We determined that the exclusion of 866 ac (351 ha) of land in Unit 6 (Subunits 6D and 6E) owned by or under the jurisdiction of Western Riverside County MSHCP permittees from the revised designation of critical habitat for *Navarretia fossalis* will not result in extinction of the species. These areas are permanently conserved and managed to provide a benefit to *N. fossalis* and its habitat. Additionally, the jeopardy standard of section 7 of the Act provides assurances the species will not go extinct as a result of exclusion from critical habitat designation. The consultation requirements of section 7(a)(2) and the attendant requirement to avoid jeopardy to *N. fossalis* for projects with a Federal nexus will provide significant protection to the species. Therefore, based on the above discussion, we are excluding approximately 866 ac (351 ha) of conserved and managed land in Unit 6 (Subunits 6D and 6E) owned by or under the jurisdiction of Western Riverside County MSHCP permittees from this revised critical habitat designation.

Economics

An analysis of the economic impacts for the previous proposed critical habitat designation for *Navarretia fossalis* was conducted and made available to the public on August 31, 2005 (70 FR 51742). That economic analysis was finalized for the final rule to designate critical habitat for *N. fossalis* published in the **Federal Register** on October 18, 2005 (70 FR 60658). The analysis determined that the costs associated with critical habitat for *N. fossalis* across the entire area considered for designation (across designated and excluded areas) were primarily a result of the potential effects of critical habitat designation on land development, flood control, and transportation. After excluding land in Riverside and San Diego Counties from the 2004 proposed critical habitat (69 FR 60110; October 7, 2004), the economic impact was estimated to be between $13.9 and $32.1 million over the next 20 years. Based on the 2005 economic analysis, we concluded that

the designation of critical habitat for *N. fossalis,* as proposed in 2004, would not result in significant small business impacts. This analysis is presented in the document making available the economic analysis published in the **Federal Register** on August 31, 2005 (70 FR 51742).

We prepared a new economic impact analysis associated with this revised critical habitat designation for *Navarretia fossalis*. In the revised DEA, we evaluated the potential economic effects on small business entities resulting from implementation of conservation actions related to the proposed revision to critical habitat for *N. fossalis*. The analysis is based on the estimated incremental impacts associated with the proposed rulemaking as described in sections 3 through 10 of the analysis. We announced the availability of the draft economic analysis in the **Federal Register** on April 15, 2010 (75 FR 19575).

The final economics analysis determined that the costs associated with critical habitat for *Navarretia fossalis*, across the entire area considered for designation (both designated and excluded areas), are primarily a result of the potential effects of critical habitat designation on transportation, land development, and flood control. The incremental economic impact of designating critical habitat was estimated to be between $846,000 and $1.2 million over the next 20 years using a 7 percent discount rate ($70,000 and $100,000 annualized) (Entrix 2010, p. ES-3). The difference between the economic impacts projected with this designation compared to those in the 2005 designation are due to the use of an incremental analysis in this designation rather than the broader coextensive analysis used in the 2005 designation. Additionally, the economic analysis for the 2005 designation included all 31,086 ac (12,580 ha) of essential habitat while the 2010 analysis included only the 7,609 ac (3,079 ha) that were proposed for designation. Based on the 2010 final economic analysis, we concluded that the designation of critical habitat for *N. fossalis,* as proposed in 2009, would not result in significant small business impacts. This analysis is presented in the Final Economic Analysis of Proposed Revised Critical Habitat Designation for Spreading Navarretia (FEA)(Entrix 2010).

Summary of Comments and Recommendations

We requested written comments from the public on the proposed rule to revise critical habitat for the *Navarretia fossalis* during two comment periods. The first comment period opened with the publication of the proposed revised rule in the **Federal Register** on June 10, 2009 (74 FR 27588), and closed on August 10, 2009. The second comment period opened with the publication of the availability of the DEA published in the **Federal Register** on April 15, 2010 (75 FR 19575) and closed on May 17, 2010. During both public comment periods, we contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed rule to revise critical habitat for this species and the associated DEA. During the comment periods, we requested all interested parties submit comments or information related to the proposed revisions to critical habitat, including (but not limited to) the following: unit boundaries; species occurrence information and distribution; land use designations that may affect critical habitat; potential economic effects of the proposed designation; benefits associated with critical habitat designation; areas proposed for designation and associated rationale for the non-inclusion or considered exclusion of these areas; and methods used to designate critical habitat.

During the first comment period, we received 12 comments directly addressing the proposed revised critical habitat designation, 4 from peer reviewers and 8 from public organizations or individuals. During the second comment period, we received one comment from local government addressing the proposed critical habitat designation and the DEA. We did not receive any requests for a public hearing.

Peer Review

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from four knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which it occurs, and conservation biology principles pertinent to the species. We received responses from all four peer reviewers who provided additional information, clarifications, and suggestions that we incorporated into the rule to improve the revised critical habitat designation.

We reviewed all comments received from the peer reviewers and the public for substantive issues and new information regarding the designation of critical habitat for *Navarretia fossalis*. All comments are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Reviewer Comments

Comment 1: One peer reviewer was supportive of the proposed revised critical habitat rule. The reviewer stated the proposed rule was well thought-out, based on sound data, and presented a thorough analysis. The reviewer further stated that *Navarretia fossalis'* specific needs for ephemerally wet habitats and limited dispersal ability were appropriately analyzed and considered in the proposed revised rule. The reviewer concluded our revised methods were thorough, logical and biologically supported, and limited the proposed designation to areas necessary for maintaining *N. fossalis* persistence.

Our Response: We appreciate the peer reviewer's critical review.

Comment 2: One peer reviewer stated that large, well-established *Navarretia fossalis* populations need to be protected; therefore, the reviewer believe the definition of "core habitat areas" as relatively large areas of intact habitat with existing populations in the proposed revised rule was reasonable. The reviewer further stated that limited gene flow among populations and the range of soil and water conditions among habitats suggest significant range-wide genetic variability of *N. fossalis*; therefore, the reviewer believes populations on the periphery of the geographical range and those that occupy unique non-core habitats are important to species preservation. The reviewer stated that designating only relatively large intact habitat areas as critical habitat could lead to significant loss of genetic diversity and preclude species' survival and recovery and therefore, agreed with our inclusion of both large and smaller areas for *N. fossalis*.

Our Response: We appreciate the peer reviewer's critical review and have incorporated their comments into the rule as appropriate.

Comment 3: One peer reviewer offered technical and organizational comments. The reviewer stated the proposal writing style was professional and understandable. The reviewer noted the proposal was better organized than past critical habitat proposals on *Navarretia fossalis*, as well as other critical habitat designations for listed species that occur in similar habitat, and the use of tables to help explain

differences between the 2005 and 2009 proposals was helpful. The reviewer further stated the usefulness of maps in the printed rule for public review of specific units was limited, and the lack of UTM coordinates and a 100-m grid made it difficult for the public to reproduce maps at different scales, overlay features with mapping programs, and confirm map accuracy.

Our Response: We appreciate the peer reviewer's comments and will consider this advice when publishing future proposed critical habitat designations.

Comment 4: One peer reviewer commented on text in the **Areas Needed for Conservation: Core and Satellite Habitat Areas** section of the proposed rule. The reviewer stated since the Service clearly based these proposed areas on new information, there should have been a citation or explanation as to why Mesa de Burro was considered a "core population." The reviewer stated they were able to verify reports of large populations qualifying Mesa de Burro as a "core population," but the Mesa de Burro site may not be biologically equivalent with the other "core population complexes." The reviewer defined "core population complexes" as numerous vernal pools and argued the Mesa de Burro occurrence appears to be restricted to a small number of pools. The reviewer suggested it was probably best to describe Mesa de Burro as a "large and important population," since it is not really a complex of populations or occurrences.

Our Response: We understand the peer reviewer's concern regarding the ecological connotation of terms used for the *Navarretia fossalis* critical habitat designation; however, we never used the terms "core population" or "core population complexes" in the proposed rule. The only term used in the proposed revised rule and in this document with the word "core" is "core habitat area," which is a descriptive term of convenience. As described in the proposed revised rule (74 FR 27588) and the **Areas Needed for Conservation: Core and Satellite Habitat Areas** section of this rule, "core habitat area" denotes those areas that contain the highest concentrations of *N. fossalis* and the largest contiguous blocks of habitat for this species and are therefore the most critical areas for conservation of this species. The term was not intended to be synonymous with similar terms used in other documents. The term "vernal pool complex" is used in Table 3 to refer to more than one geographically proximal pool, but was not further defined.

Regarding the peer reviewer's suggested description of Mesa de Burro as a "large important population," we do not share this opinion. We are not aware of any formal definition of "occurrences" or descriptions of associated pools in a biologically delineated population. Mesa de Burro contains a relatively large abundance of observed individuals occupying multiple vernal pools, and we believe this description appropriately describes the current level of scientific knowledge. In general, we are conservative with use of the term "population" because of the term's frequent misapplication in gray literature. We refrain from using the term "population" to describe a geographically specific occupied area unless data indicate appropriate rates of genetic exchange exist among spatially clustered individuals and a geographical population distribution has been delineated. Therefore, we believe the peer reviewer's concerns regarding our use of inappropriate terminology are not well founded. We have edited the **Areas Needed for Conservation: Core and Satellite Habitat Areas** section to clarify the above issues.

Comment 5: Regarding the discussion of the PCEs in the proposed rule, one peer reviewer recommended changing, "During a typical seasonal flooding period, alkali scrub vegetation expands its distribution into deeper areas of the seasonally flooded alkali vernal plain habitat and crowds out the more ephemeral wetland species" to "During a typical seasonal flooding cycle, alkali scrub vegetation expands its distribution during the dry periods into deeper areas of the seasonally flooded alkali vernal plains habitat..." The peer reviewer also stated that light to moderate disturbance can mask or suppress some PCEs within seasonally flooded vernal alkali plains habitat. Therefore, the reviewer recommended the final rule include the following qualification regarding habitat quality: "Seasonally flooded alkali vernal plain can persist in light to moderately disturbed habitat that may obscure or suppress expression of PCEs, especially soil amendments and dryland farming activities. Reasonably restorable habitat is considered to have the applicable PCEs within the San Jacinto River flood plain and at Old Salt Creek. Many of these sites, although currently in degraded condition, are restorable and may be necessary to the recovery of the species." The peer reviewer also noted an apparent omission of the species' occurrence within the alkali Chino series soils at Old Salt Creek.

Our Response: We considered the suggested edits provided by the peer reviewer and made changes to the text above as appropriate (see **Primary Constituent Elements** section).

Comment 6: Regarding the **Special Management Considerations or Protection** section of the proposed rule, one peer reviewer recommended adding soil chemistry alteration and manure dumping to the list of threats for *Navarretia fossalis.* The reviewer stated manure dumping has reduced or eliminated alkali vernal pools over large portions of the San Jacinto River flood plain and may now be the most significant immediate threat to *N. fossalis*. The reviewer cited numerous communications with the Carlsbad Fish and Wildlife Office in which the reviewer had documented manure dumping in vernal pool habitat.

Our Response: We considered the suggested text edits to this revised critical habitat rule and made changes as appropriate (see **Special Management Considerations or Protection** section). We agree that manure dumping is a significant threat to *Navarretia fossalis*, and we agree that this activity is ongoing. We are in the process of working with local jurisdictions in Western Riverside County (including the County of Riverside) to address manure dumping through initiatives like Ordinance No. 1666 that was enacted by the City of Hemet. We hope to work further with our partners in Riverside County to reduce the threat of manure dumping (see also responses to Comments 12 and 13 below, and the **Special Management Considerations or Protection** section of this rule).

Comment 7: Regarding the **Criteria Used To Identify Critical Habitat** section of the proposed revised rule, one peer reviewer argued that based on data for similar species, two or more negative surveys during the past 10 years is an insufficient effort to confirm extirpation in lightly disturbed habitat. The reviewer advised that a lack of positive surveys for a decade suggests a population is declining or scarce, but without significant habitat disturbance as well, does not mean it is extirpated. The peer reviewer recommended that in circumstances where habitat has not been significantly altered, the Service should not conclude absence based on lack of documentation. In the case of comprehensive but negative survey results, the peer reviewer believes 20 years would be a more reliable indicator of population extirpation. The peer reviewer further noted that while this change in methodology may not change what areas meet the definition of critical habitat for *Navarretia fossalis*, the limitations of current methods should be considered in future critical habitat analyses.

Our Response: We appreciate the peer reviewer's concerns and have considered the argument that more than 20 years without positive survey data in suitable habitat is an appropriate criterion for determining likely absence of *Navarretia fossalis*. We would like to reassure the peer reviewer that we used more complex criteria than two negative surveys over a period of 10 years to determine occupancy. Negative surveys must have occurred under appropriate conditions, while habitat status was also considered. As discussed in the **Criteria Used To Identify Critical Habitat** section, we assume an area is currently occupied for areas where we had past occupancy data unless: (a) Two or more rare plant surveys conducted during the past 10 years did not find *N. fossalis* (providing the surveys were conducted in years where average rainfall amounts for a particular area are reached during the rainy season (between October and May)) and during the appropriate months to find this species (March, April, and May); or (b) the site was significantly disturbed since the last observation of the species at that location. Therefore, we believe our current methodology is appropriate.

Comment 8: One peer reviewer expressed concerns regarding occupancy status of specific pools. The reviewer argued the description of a vernal pool in Subunit 5G (Otay Lakes) as partly unoccupied may be inappropriate, because *Navarretia fossalis* is likely still present if habitat is intact and minimally disturbed. The reviewer stated a better criterion for occupancy determination would be habitat status within the vicinity of vernal pools, rather than a lack of occupancy data for the past 10 years. The peer reviewer stated they were not necessarily suggesting that the vernal pool "populations" at Otay River Valley and Otay Lakes (Unit 5) be included in critical habitat, only that the assumption of species' absence may be false.

The peer reviewer also stated that because the vernal pool complex in Subunit 5C occurs within a core habitat area (Otay Mesa) that has experienced significant habitat loss, faces significant threats, and is identified in the Recovery Plan as necessary for recovery, it seems prudent to include it in critical habitat, or offer a more compelling argument for non-inclusion.

Our Response: In such a scenario of limited survey periods, we use the available surveys as the best available science. This situation underscores the need for us to address new information as it is received. We understand the peer reviewer's concern and have considered their argument; however, habitat availability and condition does not always necessarily equate to occupancy for vernal pools species because other habitat characteristics such as hydroperiod, pool depth, soil type and other physical features also play a role. Critical habitat designations are to use the best available commercial and scientific data to identify lands that we believe contain the physical and biological features essential to the conservation of the species. Without more site specific investigation on occupancy for Subunit 5G, we cannot ascertain for certain that all of the areas are occupied solely on habitat status as recommended by the peer reviewer and have relied on our criteria for occupancy as stated above. Please see the response to Comment 7 above for further discussion regarding occupancy data and criteria used to identify critical habitat.

We agree with the peer reviewer that Subunit 5C meets the definition of critical habitat. Based on information in our files inadvertently excluded from our initial Geographic Information System (GIS) analysis, we determined that the previously proposed Subunit 5C (69 FR 60110; October 1, 2004) has documented occupancy within the past 10 years and meets the definition of critical habitat. We proposed designation of subunit 5C in our revision to the 2009 proposed. We proposed adding subunit 5C in the document that made available the DEA for the proposed revised critical habitat published in the **Federal Register** on April 15, 2010 (72 FR 19575). We are designating subunit 5C as critical habitat in this final rule. Please see edited **Summary of Changes From the 2009 Proposed Rule To Revise Critical Habitat** and **Critical Habitat Units** sections for more information.

Comment 9: One peer reviewer noted that although the proposal stated that slopes facing away from Cruzan Mesa were removed from Subunit 1A (compared to the 2005 designation), an examination of Google Earth imagery indicated some of the mesa top was also removed. The reviewer recommended subunit boundaries be modified to include the full mesa top.

Our Response: We appreciate the peer reviewer's critical review. We considered the suggested changes and revised the designated critical habitat boundary for Subunit 1A to include those areas containing the physical and biological features essential to the conservation of the species. We explained the revised proposed boundary in the document we published in the **Federal Register** on April 15, 2010 (75 FR 19575). The revision increased the designated total for Subunit 1A by 27 ac (11 ha), reflected in Table 2. For more information, see the **Summary of Changes From Previously Designated and Proposed Revised Critical Habitat** section.

Comment 10: One peer reviewer suggested there may not be sufficient data to demonstrate the Plum Canyon vernal pool in Subunit 1B meets the definition of critical habitat. The reviewer noted that although there are two collection records from 1996 and 2003, the CNDDB notes the "site requires more field work," which usually means there is some debate on specific location or population status. The peer reviewer added they were not able to confirm the location of this vernal pool through examination of aerial photographs. The peer reviewer also recommended the western portion of Subunit 3B should not be designated critical habitat because Google Earth imagery indicates this area has been graded and is unlikely to ever support the PCEs for this species.

Our Response: We appreciate the peer reviewer's critical review. We considered the suggested changes and revised this final designation by removing the western portion of Subunit 3B as discussed in the document making available the DEA (75 FR 19575; April 15, 2010). However, we believe Subunit 1B (Plum Canyon) meets the definition of critical habitat because this subunit supports a stable occurrence of *Navarretia fossalis*, provides potential connectivity with Subunit 1A, and likely supports a genetically distinct occurrence. We believe Subunit 3B (Carroll Canyon) meets the definition of critical habitat because it supports a stable occurrence of *N. fossalis* and provides potential connectivity between occurrences of *N. fossalis* in Subunits 3A and 3C. For more information, see the **Critical Habitat Units**, **Criteria Used To Identify Critical Habitat**, and **Summary of Changes From Previously Designated and Proposed Revised Critical Habitat** sections.

Comment 11: One peer reviewer recommended multiple changes to the boundary of Subunit 6B as follows:

(1) Remove a central section south of Stetson Road that has been developed or disturbed for many years;

(2) expand the eastern edge boundary to include vernal pools at the western end of the airport because this site includes the PCEs, has documented historical occupation, includes pools that are more reliably filled than pools that were proposed for designation, and

this land has a likely Federal Aviation Administration Federal nexus;

(3) include vernal pools and wet depressions that form fairly reliably in the northwest portion of the subunit;

(4) remove the drier area at the northern end just south of Devonshire Road; and

(5) remove the eastern corner because it either has active residential development or an approved development proposal and is heavily degraded.

Our Response: We appreciate the peer reviewer's critical review. We considered the suggested changes and revised the final critical habitat boundary as noticed in the NOA of the DEA (75 FR 19575; April 15, 2010). For more information see the **Summary of Changes From the Proposed Revised Rule and the Previous Critical Habitat Designation**.

Comment 12: One peer reviewer believes that manure dumping should be specifically mentioned in the section of this critical habitat designation that outlines activities that, when carried out, funded, or authorized by a Federal agency, may affect critical habitat and, therefore, should result in consultation for *Navarretia fossalis*: **Effects of Critical Habitat Designation** section, subsection (2) titled **Application of the 'Adverse Modification' Standard** section, paragraph describing "Actions that would impact soil and topography." The peer reviewer argued that widespread manure dumping along the San Jacinto River, which alters soil chemistry (reducing alkalinity and clay and silt composition ratios) and topography (elevates soil surface and suppresses depressions formation), is a significant threat to the species.

Our Response: We considered the peer reviewer's suggested edits when preparing this revised critical habitat rule and made changes to the **Effects of Critical Habitat Designation**, **Application of the 'Adverse Modification' Standard** section. We agree that manure dumping is a significant threat to *Navarretia fossalis* and the PCEs require special management considerations or protection to reduce the threat (see the **Special Management Considerations or Protection**). The Western Riverside County MSHCP does not prohibit permittees from engaging in manure dumping on non-conserved lands where a Federal nexus is present and there is no local ordinance to prevent dumping; therefore, we determined that designation of critical habitat would provide significant additional habitat protection. We also determined that education has been inadequate in some areas with regard to the severity of this threat; therefore, designation of critical habitat where manure dumping can occur would provide a significant educational conservation benefit (see also response to Comments 6 and 13, and the **Western Riverside County Multiple Species Habitat Conservation Plan (Western Riverside County MSHCP)** section).

Comment 13: One peer reviewer believes that exclusion of lands owned under the jurisdiction of the Western Riverside County MSHCP permittees should not be excluded from critical habitat based on partnership benefits. As an example, the peer reviewer stated that areas along the San Jacinto River and near the city of Hemet have not been adequately protected. These areas were identified in the Western Riverside County MSHCP as necessary for the conservation of *Navarretia fossalis* and were excluded from the 2005 final critical habitat designation. The peer reviewer asserted that habitat vandalism and incidental destruction in all vernal pools within the Western Riverside County MSHCP plan area have continued, and in some areas increased, since the Western Riverside County MSHCP was permitted. The peer reviewer discussed at length and in detail evidence that they believe suggests land-owners who are aware of the conservation value of vernal pools are working to eradicate habitat rather than "partnering with regulators" to conserve it. Additionally, the peer reviewer argued that unlike other approved HCPs, the reviewers believe the Service has evidence that the Western Riverside County MSHCP is not providing the benefits "claimed to justify exclusion in the proposed revised critical habitat rule." The reviewers further hypothesized that should impacts continue at the rate and magnitude as occurred during the first 5 years of the Western Riverside County MSHCP implementation, there could be almost no habitat left in 5 years outside the San Jacinto Wildlife Area and the Metropolitan Water District Vernal Pool Preserve.

Our Response: We appreciate the peer reviewer's concerns regarding adequate protection of *Navarretia fossalis* under the Western Riverside County MSHCP. Although not specifically stated by the peer reviewer, the comment indicates the reviewer believes:

(1) The benefits of exclusion (based primarily on partnerships benefits) would be lower than the benefits of inclusion because these partnerships have provided less benefit to *N. fossalis* to-date than anticipated; and

(2) The benefits of inclusion (non-redundant protections and education provided by critical habitat designation) are greater because conservation actions mandated by the HCP are not being implemented.

Benefits provided by existing HCPs are not considered a benefit of exclusion because they would remain in place regardless of critical habitat designation; however, they do minimize the benefits of inclusion to the extent they are redundant with protection measures that would be provided by a critical habitat designation. As described in the **Application of Section 4(b)(2) of the Act** section, the likelihood of a project with a Federal nexus occurring in Subunits 6D (Barry Jones Wetland Mitigation Bank) and 6E (PQP lands) in the Western Riverside County MSHCP revised critical habitat is small because these areas are currently conserved and managed; therefore, the regulatory and educational benefits of inclusion are insignificant. Additionally, the portion of Subunit 6B that is in the City of Hemet is protected by an ordinance that addresses illegal manure dumping, an activity that is not covered by the Western Riverside County MSHCP; however, this area does not receive long-term conservation and management for the benefit of *Navarretia fossalis* and its habitat. Due to this additional protection from manure dumping, the benefits of inclusion of this portion of Subunit 6B as critical habitat are somewhat lessened.

Regarding the benefits of exclusion, the adequacy of *Navarretia fossalis* protection under an HCP is relevant to the value of partnerships to the extent it demonstrates the overall conservation value of a regional HCP permit. We believe the Western Riverside County MSHCP generally incorporates ongoing management and protection that should benefit the conservation of *N. fossalis* and its habitat over the long term. Please refer to the **Application of Section 4(b)(2) of the Act** section for further discussion on the Western Riverside County MSHCP, including discussion on areas receiving long-term conservation and management that we have excluded under section 4(b)(2) of the Act.

Based on new information, we did find the benefits of inclusion in critical habitat to be greater in some areas within the Western Riverside County MSHCP than we estimated in the October 18, 2005, critical habitat rule (70 FR 60658). We determined that designation of critical habitat for *Navarretia fossalis* would provide significant additional habitat protection

in Subunits 6A, 6B, and 6C. We came to this determination because the Western Riverside County MSHCP does not currently provide for the long-term conservation and management of *N. fossalis* in these subunits, and the HCP does not prohibit permittees from engaging in manure dumping activities (a significant new threat on non-conserved lands that was not identified in the HCP or the associated biological opinion (Service 2004b, pp. 369–378)). Therefore, in areas where a Federal nexus exists (see also Comments 6 and 12 above), we concluded that the significant regulatory benefit of including the areas in critical habitat outweigh the partnership benefits of exclusion. We also determined that education to date has been inadequate in some areas with regard to the severity of manure dumping; therefore, designation of *N. fossalis* critical habitat where manure dumping can occur would provide a significant educational conservation benefit.

In summary, we found the benefits of exclusion of lands covered by the Western Riverside County MSHCP to be greater than the minimal benefits of including these lands in the critical habitat designation for those areas that are currently conserved and managed (i.e., Subunits 6D and 6E). Alternatively, the benefits of inclusion are greater for non-conserved, non-managed lands within the plan area (i.e., Subunit 6A, 6B, and 6C). See the **Application of Section 4(b)(2) of the Act** section (particularly the **Weighing Benefits of Exclusion Against Benefits of Inclusion—Western Riverside County MSHCP** section) for a complete discussion of the Western Riverside County MSHCP exclusion analysis.

Issues discussed by the peer reviewer, while they may reflect valid concerns with regard to HCP implementation, do not reduce the benefits of exclusion for Subunits 6D and 6E. We believe that conservation is adequate in these areas as a result of the long-term conservation and management of Subunits 6D and 6E (see **Benefits of Exclusion—Western Riverside County MSHCP** and the **Weighing Benefits of Exclusion Against Benefits of Inclusion—Western Riverside County MSHCP** sections). However, we will consider the information submitted by the peer reviewer in our ongoing assessments of the Western Riverside County MSHCP, and continue to work with permittees to ensure that the HCP is properly implemented to benefit *Navarretia fossalis* and its habitat.

Comment 14: One peer reviewer stated that the Service should not exclude habitat within the plan area of HCP permits that are not yet issued. The reviewer stated draft plans provide no guarantee that the final HCPs will provide adequate species conservation.

Our Response: We did not exclude any habitat from this revised critical habitat designation that falls within the plan area of an HCP permit that has not yet been issued.

Other Comments

Comment 15: Two commenters provided biological information for our consideration.

(1) One commenter provided information about the presence of *Navarretia fossalis* at one location in San Marcos, California, including reference to a website with detailed biological information about this location. The commenter indicated that they believe the future of the site is uncertain and *N. fossalis* grows in the larger vernal pools onsite.

(2) A second commenter stated that although "scrub" habitat elements may expand into alkali playa, the more common process currently observed is replacement of alkali playa by alkali grassland (regarding the **Primary Constituent Elements– Ephemeral Wetland Habitat** section of the proposed rule). The second commenter also noted that in some of the known species' localities, alkali grassland has become dominated by species less commonly found in the wetter areas of the alkali playa, possibly due to alteration of hydrology.

(3) The second commenter described distinct "riverine pools" characterized by unique floristic elements, such as *Trichocoronis wrightii* (limestone bugheal), which only occur with *Navarretia fossalis* within the San Jacinto River Unit.

(4) The second commenter stated that "general anecdotal observations" of habitat conditions at the Salt Creek Seasonally Flooded Alkali Plain indicate a recent decline in *Navarretia fossalis* densities, especially at the Stowe vernal pool. The commenter acknowledged these observations may reflect a response to rainfall patterns, but stated the habitat does appear to have experienced drying of the ephemeral wetlands and vernal pools, along with an expansion of *Hordeum marinum* subsp. *gussoneanum* (cheat grass).

(5) The second commenter stated that a number of the larger vernal pools in the Perris plain region occur on Willows soils.

(6) Finally, the second commenter noted the proposed expansion of waterfowl ponds and wet soil management in portions of the San Jacinto Wildlife Area (under the Western Riverside County MSHCP) may negatively affect *Navarretia fossalis*. The expansion could benefit *N. fossalis* by providing more habitat for this species; however, ponding duration and exotic plant species used to increase the waterfowl habitat suitability could conflict with existing or expanded *N. fossalis* populations within the San Jacinto Wildlife Area.

Our Response: We appreciate all information provided. We are aware of the San Marcos vernal pools information, which is identified in Table 2 as Subunit 4C1 in the San Marcos Upham location. Additionally, the Service regularly works with CDFG to ensure that the seasonally flooded alkali vernal plain habitat in the San Jacinto Wildlife Area continues to function and provide a benefit to *Navarretia fossalis* and other sensitive species that use this habitat. We will consider the information regarding the proposed expansion of waterfowl ponds and wet soil management in portions of the San Jacinto Wildlife Area in future conservation recommendations and decisions; however, we do not believe it is relevant to this revised critical habitat designation for *N. fossalis*.

We considered the other information provided and edited this revised critical habitat rule as appropriate (see **Primary Constituent Elements—Ephemeral Wetland Habitat** and **Background—Geographic Range and Status** sections above).

Comment 16: One commenter recommended that the total number of *Navarretia fossalis* localities be carefully reviewed and possibly updated (regarding the **Background—Geographic Range and Status** section of the proposed rule). The commenter stated that they believe the section failed to cite some potentially important references, including Brown's (2003) listing of ephemeral pools in western Riverside County, and CNDDB collection records from the Elsinore-Murrieta area and from San Luis Obispo County.

Our Response: Regarding the suggested **Background** section citations, the data in Brown's (2003) record table is part of our Service files and was incorporated in our GIS database, we are not aware of any CNDDB collection records from the Elsinore-Murrieta area (and none were provided by the commenter), and the San Luis Obispo County record has never been verified; therefore, we did not include those suggested record citations in this final rule.

Comment 17: Two commenters expressed general opposition to revising

critical habitat because of the resulting costs to taxpayers and private companies.

Our Response: According to sections 3(5)(A) and 4(b) of the Act and our implementing regulations under 50 CFR 424.12, we are required to designate critical habitat for federally listed species. Following the listing of *Navarretia fossalis* in 1998 and the subsequent designation of the species' critical habitat in 2005, the Center for Biological Diversity filed a complaint on December 19, 2007, in the U.S. District Court for the Southern District of California challenging the 2005 designation. This lawsuit challenged the validity of the information and reasoning we used to exclude areas from the 2005 critical habitat designation for *N. fossalis*. On July 25, 2008, the parties reached a settlement agreement, in which we agreed to reconsider the critical habitat designation for the species. The action of revising the designation is the result of our following a court order. Therefore, while we acknowledge the commenters' concern that revising critical habitat is costly, we do not have discretion with regard to completion of court-ordered actions (see **Previous Federal Actions** section above for more information regarding completion of this revised rule).

Comment 18: Two commenters provided suggestions regarding the proposed critical habitat designation review process. One commenter stated that graphics provided in the proposed rule did not allow detailed review of areas proposed as revised critical habitat and thus recommended the Service post topographic maps or aerial photographs on the Internet during open comment periods. A second commenter requested that no additional areas be proposed as revised critical habitat without recirculation of the entire rule for notice and comment.

Our Response: We agree it would be advantageous to provide more detailed graphics for public review and will consider the practicality of doing so when publishing future proposed critical habitat designations.

According to section 4(b)(5) of the Act and the Administrative Procedure Act (5 U.S.C. Subchapter II), we are required to provide an adequate opportunity for the public to comment on any critical habitat rule. Although it is not fiscally practical for us to recirculate an entire rule for notice and comment, any areas proposed as revised critical habitat for *Navarretia fossalis* that are in addition to those listed in the proposed revised critical habitat rule (74 FR 27588; June 10, 2009) were described in the document that made available the DEA (75 FR 19575; April 15, 2010). As a result, the opportunity for public review and comment prior to designation of this revised critical habitat designation occurred as a result of an initial public comment period between June 10, 2009, and August 10, 2009, and a second public comment period between April 15, 2010, and May 17, 2010.

Comment 19: Two commenters recommended adding or removing areas from the *Navarretia fossalis* proposed revised critical habitat. The first commenter recommended proposed revised critical habitat be expanded at the "northern and southern boundaries" of the San Jacinto River subunit (Subunit 6A). Specifically they recommended proposed revised critical habitat be expanded at the following locations:

(1) At the northern boundary east to include pond areas within the San Jacinto Wildlife Area;

(2) Around 13th Street east of the County owned property;

(3) Eastward near Simpson Road in the area of San Jacinto Avenue to include areas north of Ellis Avenue;

(4) North of the San Jacinto river to near Redlands Avenue;

(5) To include the entire vernal pool found south off Case Road;

(6) South of the San Jacinto River, possibly to the boundary of Green Valley Parkway;

(7) Westward to include pools in the northwestern corner of the Hemet Airport within the Salt Creek Seasonally Flooded Alkali Plain; and

(8) At the southern end of the Wickerd Road and Scott Road locality.

A second commenter asserted that the proposed critical habitat designation falls short of the Act's "recovery requirement" by focusing solely on species' survival. They asserted in particular that additional areas need to be proposed to ensure ecological features required for species' recovery are maintained, such as water quality, inundation frequency, and habitat connectivity.

Our Response: We considered the changes suggested by the first commenter and revised this final revised critical habitat designation as appropriate as discussed in the document making available DEA (75 FR 19575; April 15, 2010). For more information see the **Summary of Changes From the Proposed Revised Rule and the Previous Critical Habitat Designation** section and our response to Comment 11

Regarding the second commenter's assertion that additional critical habitat areas need to be proposed to meet the "[Act's] recovery requirement," we believe we have designated all the specific occupied areas which are found those physical or biological features that are essential to the conservation of the species. We recognize that the designation of critical habitat may not include all of the habitat that may eventually be determined to be necessary for the recovery of *Navarretia fossalis*, and critical habitat designations do not signal that habitat outside the designation is unimportant or may not contribute to recovery. Areas outside the revised critical habitat designation will continue to be subject to conservation actions implemented under section 7(a)(1) of the Act and regulatory protections afforded by the section 7(a)(2) jeopardy standard and the prohibitions of section 9 of the Act if actions occurring in these areas may affect *N. fossalis*; these protections and conservation tools will continue to contribute to recovery of this species. The second commenter did not suggest specific additional areas for inclusion in the proposed revised critical habitat designation, and we are not aware of any additional areas required for species recovery that should be proposed as revised critical habitat.

Comment 20: One commenter suggested edits to the proposed revised critical habitat rule text. The commenter stated that more information could have been included in the **Background** section of the proposed rule regarding the different substrates, hydrology, and habitat status of each core habitat area. The commenter also recommended we expand our discussion of the extent of protection during the early phase of HCP implementation and for plant species under the Act. The commenter specifically recommended the following edits:

(1) Note that *Navarretia fossalis* is generally restricted to vernal pools and alkali playas, and that in the alkali grasslands, this species is restricted to small vernal pools or other depressions within this community (**Background—Habitat** subsection);

(2) Note that suitability of hydrological conditions for the germination of this species vary on an annual basis, which means that *N. fossalis* can be absent for a number of years and the total number of plants can vary depending on the timing, duration, and extent of ponding (**Background—Habitat** subsection);

(3) Describe the unique nature of the ephemeral wetlands found along the San Jacinto River, especially how large scale flooding events, although uncommon, appear to maintain *N. fossalis* habitat and provide a species dispersal mechanism (**Primary**

Constituent Elements; **Ephemeral Wetland Habitat** subsection);

(4) Discuss the importance of specific microtopography required to provide sufficient ponding duration (hydrology) to support this species and the threat posed by alteration of microtopography (**Primary Constituent Elements**; **Ephemeral Wetland Habitat** subsection); and

(5) Mention a number of the larger vernal pools in the Perris Plain region occur on the Willows Soil Series (**Primary Constituent Elements**: **Topography and Soils that Support Ponding During Winter and Spring** subsection).

With regard to PCEs in general, the commenter stated:

(1) The importance of overland water flow and the size of the local watershed required to maintain ephemeral wetlands needs to be emphasized; and

(2) More information should be provided on the current condition of the PCEs in each subunit.

The commenter made the following specific edit recommendations for the **Criteria Used to Identify Critical Habitat** section:

(1) Step 3 should be expanded to note how total proposed area reductions in essential habitat were determined and the extent of local watershed inclusion in a unit; and

(2) Step 4 should include notes of any recent field or site condition observations.

The commenter made the following specific edit recommendations for the **Summary of Changes from Previously Designated Critical Habitat** section of the proposed revised rule:

(1) Regarding "Cruzan Mesa" subsection, they stated the pools could not fill by overland flow of water on the mesa, and recommended we explain how the habitat could be self-sustaining if the watershed area outside of proposed revised critical habitat boundaries was lost;

(2) Regarding "Wickerd Road and Scott Road" subsection, they stated more information should be provided on the current condition at this pool complex; and

(3) Regarding the "Santa Rosa Plateau" subsection, they recommended providing a summary of known Mesa de Burro species' distribution information.

The commenter made the following specific edit recommendations for the **Critical Habitat Units** section of the proposed revised rule:

(1) Expand the discussion of current habitat conditions and threats regarding the "San Jacinto River" and "Salt Creek Seasonally Flooded Alkali Plain" subsections;

(2) Discuss what habitat conservation has been or will be achieved under the Western Riverside County MSHCP at important occupied localities; and

(3) Note the presence of regionally significant vernal pools in addition to the areas of alkali playa and grassland; generally these pools are floristically distinct from these communities.

Our Response: We appreciate these editorial recommendations and have made changes to the text of this final rule, where appropriate (see **Background, Primary Constituent Elements**, **Criteria Used to Identify Critical Habitat**, **Summary of Changes From the Proposed Revised Rule and the Previous Critical Habitat Designation**, and **Critical Habitat Units** sections above). In some cases, the amount of detail requested by the commenter was not appropriate for the purpose of designating critical habitat; therefore some information was not incorporated.

Comment 21: Two commenters stated that they believe lands owned or under the jurisdiction of the Western Riverside County MSHCP permittees should be excluded from the revised *Navarretia fossalis* critical habitat designation. The commenters argued for exclusion because the HCP already adequately provides for the survival and recovery of the species, and under section 6.9 of the HCP and section 14.10 of the associated Implementing Agreement, no critical habitat should be designated in the HCP Plan Area. The first commenter also argued that case law ("15 vernal pool species court case") supports exclusion where the court upheld the exclusion of the Western Riverside County MSHCP. The second commenter stated that although the Western Riverside Flood Control and Water Conservation District is a Western Riverside County MSHCP permittee whose projects are currently subject to the provisions of the HCP, critical habitat designation may affect the continued operation, maintenance, and restoration of existing flood control facilities as well as the construction of future flood control improvements along the San Jacinto River and within the Salt Creek watershed. The second commenter also argued designating critical habitat within the Western Riverside County MSHCP Plan boundaries would create duplicative regulatory efforts without any additional benefits to the species.

Our Response: With regard to the commenters' assertions that lands owned or under the jurisdiction of the Western Riverside County MSHCP should be excluded because the HCP adequately provides for the survival and recovery of the species, or because the HCP is being fully implemented, we agree that the protection afforded *Navarretia fossalis* and its essential habitat under the MSHCP is a relevant consideration in our section 4(b)(2) exclusion analysis. Exclusion is based on our determination that the benefits of exclusion outweigh the benefits of inclusion, and that exclusion of an area will not result in extinction of a species. We found the benefits of exclusion of lands covered by the Western Riverside County MSHCP to be greater than the minimal benefits of including these lands in the critical habitat designation in areas that receive long-term conservation and management for the species and its habitat (i.e., Subunits 6D and 6E). For more information, see response to Comment 13 and the **Application of Section 4(b)(2) of the Act** section for a detailed discussion.

After public review and comment on the proposed revision to critical habitat for *Navarretia fossalis*, we determined through our analysis under section 4(b)(2) of the Act that the maximum extent of allowable exclusions under the Western Riverside County MSHCP was limited to the exclusion of lands owned by or under the jurisdiction of the permittees of the Western Riverside County MSHCP in Subunits 6D and 6E where lands are conserved and managed in perpetuity (see **Application of Section 4(b)(2) of the Act—Western Riverside County Multiple Species Habitat Conservation Plan (Western Riverside County MSHCP)** section above for a detailed discussion of the exclusion analysis.

We do not foresee additional effects of critical habitat designation on flood control operations along the San Jacinto River and within the Salt Creek watershed as a result of mandated habitat conservation actions. We believe any impacts to partnerships (a benefit of exclusion) would be outweighed by the benefits of inclusion as explained above. Therefore, the commenter's argument that lands owned by or under the jurisdiction of Western Riverside County MSHCP permittees should be excluded because of possible impacts to the flood control facilities and future flood control improvements is not adequately supported.

Comment 22: Two commenters suggested that the Service should not exclude lands owned or under the jurisdiction of the Western Riverside County MSHCP permittees from the revised *Navarretia fossalis* critical habitat designation. The first commenter opposed to exclusion argued that no biological benefits are achieved by excluding habitat within HCP Plan areas

from critical habitat designation because:

(1) Research demonstrates species with designated critical habitat are less likely to be declining, and twice as likely to be recovering, than species without critical habitat (cited Taylor *et al.* 2005);

(2) The Western Riverside County MSHCP fails to address degradation of habitat inside the reserves, especially the ongoing problem of manure dumping activities; and

(3) There are nonsignatory agencies that have jurisdiction within the Western Riverside County MSHCP plan area who conduct activities outside of the HCP process that require section 7 consultation.

The second commenter opposed to exclusion gave the following reasons:

(1) Critical habitat designation provides potential for enhanced protection and recovery of this species within the HCP plan area, because these areas require "special management considerations or protection," and it is not a "hindrance to the conservation process";

(2) Habitat continues to be lost due to the common practices of disking, soil amendment, and hydrology alteration within the plan area because the Western Riverside County MSHCP does not address these existing land use practices and did not provide procedures for conserving specific populations of *Navarretia fossalis*;

(3) The benefits of critical habitat designation are especially great along the San Jacinto River, (Upper) Salt Creek, and the Wickerd Road and Scott Road vernal pools because threats are high and there is a potential Federal nexus in this area; and

(4) The proposed flood control plan for the San Jacinto River is a covered activity under the Western Riverside County MSHCP and the loss of infrequent, major flooding events may negatively affect the "metapopulation ecology" (dispersal required to recolonize pools where subpopulations have been extirpated) of *N. fossalis*.

Our Response: With regard to the commenters' assertions that lands owned or under the jurisdiction of the Western Riverside County MSHCP should not be excluded because the HCP may not adequately provide for the survival and recovery of the species, or because is not being fully implemented, we agree that the protection afforded *Navarretia fossalis* and its essential habitat under the Western Riverside County MSHCP is a relevant consideration in our section 4(b)(2) exclusion analysis. Exclusion is based on our determination that the benefits of exclusion outweigh the benefits of inclusion, and that exclusion of an area will not result in extinction of a species. We found the benefits of exclusion of lands covered by the Western Riverside County MSHCP to be greater than the minimal benefits of including these lands in the critical habitat designation in areas that are currently receiving long-term conservation and management to benefit the species (i.e., Subunits 6D and 6E). For more information, see response to Comment 13 and the **Application of Section 4(b)(2) of the Act** section for a detailed discussion.

We do not agree with the commenter that Taylor *et al.*'s (2005, pp. 360–367) conclusions compel a finding that lands covered by the Western Riverside County MSHCP should be included in the revised *Navarretia fossalis* critical habitat designation. The results of Taylor *et al.* (2005, pp. 360–367) do indicate a significant conservation benefit of critical habitat designation; however, that study did not analyze or discuss the effects of HCP-based exclusions or the above-described exclusion determination process for *N. fossalis*. The benefits of excluding lands covered by a particular HCP based on partnerships must be analyzed independently and balanced against the benefits of inclusion (based on protections provided by critical habitat that are not redundant with HCP protections) because HCPs:

(1) Are variable in scope;

(2) Contain variable conservation and management planning efforts; and

(3) Use species abundance trends that may not be apparent for many years to determine effects of conservation measures.

Therefore, the general conclusions in the literature cited by the commenter do not warrant the specific conclusion that all essential habitat covered by HCPs should be included in critical habitat.

We agree with the commenter that when there are agencies with jurisdiction in the HCP plan area that are not HCP signatories who may conduct activities requiring section 7 consultation; the regulatory benefits of critical habitat designation may be higher in situations where the likely protections afforded through the section 7 consultation are not redundant with, but would go beyond, those afforded under the HCP. However the benefits of including or excluding particular areas may vary even within a specific HCP, and determining those relative benefits requires an evaluation of the circumstances affecting each area. The mere fact that a Federal nexus exists does not mean that regulatory benefits of designation will outweigh the benefits of exclusion.

Regarding the comment that areas should be included in critical habitat designation because they require special management considerations or protection, this language refers to the definition of critical habitat, not the exclusion process. Section 3(5)(A)(i) of the Act defines critical habitat, in part, as areas which may require special management considerations or protection. Section 4(b)(2) of the Act directs the Secretary to consider the impacts of designating such areas as critical habitat and provides the Secretary with discretion to exclude particular areas if the benefits of exclusion outweigh the benefits of inclusion. In this rule, we do not state that areas that are being adequately managed and protected do not meet the definition of critical habitat under section 3(5)(A) of the Act. Rather, we considered the management and protection of particular areas that do meet the definition of critical habitat in our exclusion analyses under section 4(b)(2) of the Act. Please see **Critical Habitat** and **Application of Section 4(b)(2) of the Act** sections above for more detailed discussions of the definition of critical habitat and exclusion analyses.

Comment 23: One commenter requested that if we designate new critical habitat, the revised critical habitat rule should include clear guidance to other Federal agencies by stating that proof of Western Riverside County MSHCP compliance will allow the agency to make a "no effect" determination with regard to projects in designated critical habitat to ensure that section 7 consultations are consistent with the Western Riverside County MSHCP and are completed in a timely manner.

Our Response: A "no effect" determination is the appropriate determination when the Federal action agency determines its proposed action will not affect a listed species or designated critical habitat. This requires a project (and species-specific) evaluation and analysis of effects to reach a "no effect" determination. Therefore, we are unable at this time to concur with any "no effect" determinations made by other Federal agencies for any future projects that may occur in *Navarretia fossalis* critical habitat.

Comment 24: One commenter requested that we exclude Subunit 4E from the revised critical habitat designation for *Navarretia fossalis* based on partnership benefits. They stated the Ramona Grasslands Open Space

Preserve in Subunit 4E is being managed and monitored according to Area Specific Management Directives built from the scientific framework laid out in the *Framework Management and Monitoring Plan for the Ramona Grasslands Open Space Preserve: San Diego County*. The commenter further stated that preserve management goals will be revised and updated to comply with the requirements of the North County MSCP once it is approved. The commenter provided a list of current management actions and specific goals for the conservation of *N. fossalis*.

Our Response: As discussed in the responses to Comments 13 and 21, exclusions under section 4(b)(2) of the Act are not based on partnership benefits alone, but whether the benefits of exclusion outweigh the benefits of inclusion. We reviewed the Area Specific Management Directives referenced by the commenter and determined that they do describe and provide beneficial conservation measures for *Navarretia fossalis* that are redundant with conservation measures provided by critical habitat designation, and therefore would reduce the benefits of inclusion in critical habitat if implementation were assured into the future. When considering the benefits of exclusion, we consider a variety of factors, including but not limited to whether the plan is finalized (i.e., approved by all parties) and there is a reasonable expectation that conservation management strategies and actions will be implemented into the future (see **Application of Section 4(b)(2) of the Act** section for further discussion). The HCP under which these measures will be assured of future implementation is not yet finalized; therefore, we determined the benefits of exclusion do not outweigh the benefits of inclusion for lands within the Ramona Grasslands Open Space Preserve portion of Subunit 4E from *N. fossalis* critical habitat designation at this time.

Comment 25: Two commenters expressed concerns regarding the inclusion or exclusion of lands owned or under the jurisdiction of MSCP permittees in the *Navarretia fossalis* final revised critical habitat designation. The first commenter opposed to exclusion argued that no biological benefits are achieved by excluding habitat within HCP plan areas from critical habitat designation because:

(1) Research demonstrates species with designated critical habitat are less likely to be declining, and twice as likely to be recovering, than species without critical habitat (cited Taylor *et al.* 2005);

(2) The MSCP fails to address degradation of habitat inside the conserved areas, especially where illegal OHV activities have "severely" impacted vernal pools; and

(3) There are nonsignatory agencies that have jurisdiction within the MSCP plan area who conduct activities outside of the HCP process that require section 7 consultation.

The second commenter stated the MSCP provides for the conservation of *Navarretia fossalis* and therefore lands owned by or under the jurisdiction of permittees should be excluded from critical habitat designation under section 4(b)(2) of the Act.

Our Response: A decision to exclude lands from critical habitat is based on an evaluation of the benefits of exclusion in comparison to the benefits of inclusion. Please see response to Comment 13 above regarding arguments for and against exclusion of lands owned by or under the jurisdiction of regional HCP permittees. We found the benefits of exclusion of lands covered by the County of San Diego Subarea Plan under the MSCP outweighed the benefits of inclusion for areas that are receiving long-term conservation and management (Subunit 3A); however, we found that the benefits of inclusion outweighed the benefits of exclusion on lands that are currently not conserved and being impacted by activities that were not covered by the County of San Diego Subarea Plan because there were potential significant benefits to the conservation of *Navarretia fossalis* that may come from the designation of critical habitat on these lands (Subunits 5B, 5F, and 5I). See response to Comment 13 and 22 and **Application of Section 4(b)(2) of the Act** section for a complete discussion.

Comment 26: One commenter recommended critical habitat be designated on military bases where applicable, and stated it is not appropriate to rely on integrated natural resources management plans (INRMPs) for protection of *Navarretia fossalis*.

Our Response: We do not have discretion to designate critical habitat on the military bases within proposed revised critical habitat as suggested by the commenter. 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 (INRMP) prepared under section 670a of this title, if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation." (See **Application of Section 4(a)(3) of the Act** section above for further discussion). We determined the INRMPs for MCB Camp Pendleton and MCAS Miramar (Marine Corps Base Camp Pendleton 2007; Gene Stout and Associates *et al.* 2006) provide benefits to *Navarretia fossalis*; therefore, the Act mandates we exempt these military bases from critical habitat designation (see **Application of Section 4(a)(3) of the Act** section above for further discussion).

Comment 27: One commenter stated that no areas should be excluded from critical habitat designation based on HCPs that have not been finalized and implemented because there is no guarantee that proposed HCPs will be finalized.

Our Response: We did not exclude any habitat from this revised critical habitat designation within the plan area of an HCP permit that has not yet been issued (see responses to Comments 14 and 24).

Comment 28: One commenter stated that areas of Unit 6 covered by the Western Riverside County MSHCP should be excluded from critical habitat designation based on the Service's permitting Biological Opinion for the Western Riverside County MSHCP (Service 2004b) for several reasons:

(1) The Service's reasoning in the 2005 rule that excluded the same areas in the 2005 designation;

(2) The proposed designation of these areas covered by the Western Riverside County MSHCP is not beneficial to the species;

(3) The Western Riverside County MSHCP precludes designation of critical habitat;

(4) Several species for which critical habitats were not designated occur on Western Riverside County MSHCP covered lands; and

(5) The idea that designations of critical habitat within the Western Riverside County MSHCP ultimately function as disincentives to such planning processes.

Our Response: For lands within the jurisdiction of the Western Riverside County MSHCP, this rule excludes a portion (Subunits 6D and 6E) and includes the remaining covered lands (Subunits 6A, 6B, and 6C) as designated critical habitat. When we conduct an exclusion analysis under section 4(b)(2) of the Act, each exclusion is based on weighing the benefits of exclusion with

the benefits of inclusion. We found the benefits of exclusion of lands covered by the Western Riverside County MSHCP to be greater than the minimal benefits of including these lands in the critical habitat designation in areas that receive long-term conservation and management of the species and its habitat (i.e., Subunits 6D and 6E). Please see the **Application of Section 4(b)(2) of the Act** section for a detailed discussion on our exclusion analyses (including why areas covered by the Western Riverside County MSHCP that are designated as critical habitat are beneficial to the species) for those areas we considered for exclusion in the proposed revised critical habitat designation (74 FR 27588), the associated document announcing the DEA (75 FR 19575), and our response to Comment 13.

With regard to the commenters concern of designating areas in this rule that were excluded in the 2005 critical habitat designation, we did not designate areas containing essential habitat features if those habitat features were already conserved and managed for the benefit of *Navarretia fossalis* because we concluded that the areas did not meet the second part of the definition of critical habitat under section 3(5)(a)(i) of the Act. We have reconsidered our approach in this rule in light of subsequent court decisions and have decided that areas containing essential habitat features that "may require" special management considerations or protection do meet the definition of critical habitat irrespective of whether the habitat features are currently receiving special management or protection. See the **Summary of Changes From the 2005 Final Designation of Critical Habitat** section for further discussion of why some areas were included as critical habitat in this rule that were excluded in the 2005 rule.

With regard to the commenter's belief that critical habitat should not be designated in the Western Riverside County MSHCP Plan Area based on language in section 6.9 of the HCP and the associated Implementing Agreement, section 14.10 of the Implementing Agreement does not preclude critical habitat designation within the plan area (Dudek and Associates 2003, p. 63). See our response to Comment 20 for a discussion of why critical habitat is not precluded under an HCP Implementing Agreement.

Required Determinations

Regulatory Planning and Review—Executive Order 12866

The Office of Management and Budget (OMB) has determined that this rule is not significant and has not reviewed this rule under Executive Order 12866 (E.O. 12866). OMB bases its determination upon the following four criteria:

(1) Whether the rule will have an annual effect of $100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

(2) Whether the rule will create inconsistencies with other Federal agencies' actions.

(3) Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

(4) Whether the rule raises novel legal or policy issues.

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 is required to 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 effect of the rule on small entities (small businesses, small organizations, and small government jurisdictions), as described below. 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 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 *Navarretia fossalis* 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; and 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 to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this rule, as well as 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.

To determine if the revised designation of critical habitat for *Navarretia fossalis* would significantly affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities, such as residential and commercial development. We apply the "substantial number" test individually to each industry to determine if certification is appropriate. However, the SBREFA does not explicitly define "substantial number" or "significant economic impact." Consequently, to assess whether a "substantial number" of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in an area. In some circumstances, especially with critical habitat designations of limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the number of small entities potentially affected, we also consider whether their activities have any Federal involvement.

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 *Navarretia fossalis* is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they authorize, fund, or carry out that may affect the species. Federal agencies also must consult with us if their activities may affect critical habitat. Designation of critical habitat, therefore, could result in an additional economic impact on small entities due to the requirement to reinitiate

consultation for ongoing Federal activities (see **Application of the "Adverse Modification" Standard** section).

In our final economic analysis of the critical habitat designation, we evaluated the potential economic effects on small business entities resulting from implementation of conservation actions related to the revised designation of critical habitat for *Navarretia fossalis*. The analysis is based on the estimated impacts associated with the rulemaking as described in sections 3 through 9 of the analysis and evaluates the potential for economic impacts related to: residential, commercial and industrial development; conservation lands management; transportation; pipeline projects; flood control; agriculture; and fire management (Entrix 2010, p. A-1). The FEA estimates the total incremental impacts associated with development as a whole to be $112,000 to $431,000 over the 20–year timeframe of the FEA. The FEA identifies incremental impacts to small entities to occur only in the development sector (Entrix 2010, p. A-2). The other categories of projects either will have no impacts (conservation land management, pipeline projects, agriculture, or fire management) or are Federal, State, or public entities not considered small or exceed the criteria for small business status (Entrix 2010, pp. A-1–A-2). Of the approximately 3,143 ac (1,272 ha) land considered developable in the designation, only 1,130 ac (457 ha) has been forecasted to be developed over the next 20–year timeframe (Entrix 2010, p. A-3). The FEA equates this acreage to 38 projects, with one developer per project (Entrix 2010, p. A-3). The FEA summarizes that two developers annually may be affected by the designation of critical habitat resulting in total annualized incremental impacts to small entities of $10,565 to $40,644 (Entrix 2010, pp. A-3, A-4). The FEA assumes all developers are considered small and states that this estimate may overstate impacts if not all of the developers are small (Entrix 2010, p. A-4). The FEA also states (Section 3 of the FEA) that where substitute land is readily available to developers, costs will be passed on to affected landowners in the form of decreased land value and that under such circumstances most of the costs will not be borne by developers (Entrix 2010, p. A-4). Please refer to our final economic analysis of critical habitat designation for *N. fossalis* for a more detailed discussion of potential economic impacts.

In summary, we considered whether this designation would result in a significant economic effect on a substantial number of small entities. The total number of small businesses impacted annually by the designation is estimated to be two, with an annualized impact of approximately of $10,565 to $40,644. This impact is less than 10 percent of the total incremental impact identified for development activities and may be an overestimate of the impacts considering that not all developers will be small and that some of these costs may be passed on to landowners. Based on the above reasoning and currently available information, we concluded this rule would not result in a significant economic impact on a substantial number of small entities for transportation, development, and flood control impacts as identified in the FEA (Entrix 2010, pp. A-1–A-4). Therefore, we are certifying that the designation of critical habitat for *Navarretia fossalis* 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

On May 18, 2001, the President issued Executive Order 13211 (E.O. 13211; "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use") on regulations that significantly affect energy supply, distribution, and use. E.O. 13211 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 finds that none of these criteria are relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with *Navarretia fossalis* 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, the Service makes 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 [T]ribal 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) As discussed in the FEA of the revised designation of critical habitat for *Navarretia fossalis*, we do not believe that this rule would significantly or uniquely affect small governments because it would not produce a Federal mandate of $100 million or greater in any year; that is, it is not a "significant regulatory action" under the Unfunded Mandates Reform Act . The FEA concludes incremental impacts may occur due to administrative costs of section 7 consultations for development, transportation, and flood control projects activities; however, these are not expected to significantly affect small governments. Incremental impacts stemming from various species conservation and development control activities are expected to be borne by the Federal Government, California Department of Transportation, CDFG, Riverside County, Riverside County Flood Control and Water Conservation District, and City of Perris, which are not considered small governments. Consequently, we do not believe that the revised critical habitat designation would significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with E.O. 12630 ("Government Actions and Interference with Constitutionally Protected Private Property Rights"), we have analyzed the potential takings implications of designating critical habitat for *Navarretia fossalis* in a takings implications assessment. Critical habitat designation does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. The takings implications assessment concludes that this designation of critical habitat for *N. fossalis* does not pose significant takings implications for lands within or affected by the designation.

Federalism—Executive Order 13132

In accordance with E.O. 13132 (Federalism), the rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior, we requested information from, and coordinated development of the proposed critical habitat designation with appropriate State resource agencies in California. 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 primary constituent elements 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) would 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 E.O. 12988 (Civil Justice Reform), this rule 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. This final rule uses standard property descriptions and identifies the physical and biological features essential to the conservation of the subspecies within the designated areas to assist the public in understanding the habitat needs of *Navarretia fossalis*.

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 (NEPA) (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 as defined by NEPA 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), E.O. 13175, and the Department of the Interior's manual at 512 DM 2, we have a 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 occupied at the time of listing that contain the features essential for the conservation of the species, nor are there any unoccupied tribal lands that are essential for the conservation of *Navarretia fossalis*. Therefore, we are not designating critical habitat for *N. fossalis* on tribal lands.

References Cited

A complete list of all references cited in this rulemaking is available on *http://www.regulations.gov* and upon request from the Field Supervisor, Carlsbad Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT** section).

Authors

The primary authors of this notice are the staff members of the Carlsbad Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT** section).

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; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

■ 2. In § 17.96(a), revise the entry for "*Navarretia fossalis* (spreading navarretia)" under family Polemoniaceae to read as follows:

§ 17.96 Critical habitat—plants.

(a) *Flowering plants.*

* * * * *

Family Polemoniaceae: *Navarretia fossalis* (spreading navarretia)

(1) Critical habitat units are depicted for Los Angeles, Riverside, and San Diego Counties, California, on the maps below.

(2) Within these areas, the primary constituent elements (PCEs) for *Navarretia fossalis* consist of three components:

(i) PCE 1—*Ephemeral wetland habitat.* Vernal pools (up to 10 ac (4 ha)) and seasonally flooded alkali vernal plains that become inundated by winter rains and hold water or have saturated soils for 2 weeks to 6 months during a year with average rainfall (i.e., years where average rainfall amounts for a particular area are reached during the rainy season (between October and May)). This period of inundation is long enough to promote germination, flowering, and seed production for *Navarretia fossalis* and other native species typical of vernal pool and seasonally flooded alkali vernal plain habitat, but not so long that true wetland species inhabit the areas.

(ii) PCE 2—*Intermixed wetland and upland habitats that act as the local watershed.* Areas characterized by mounds, swales, and depressions within a matrix of upland habitat that result in intermittently flowing surface and subsurface water in swales, drainages, and pools described in PCE 1.

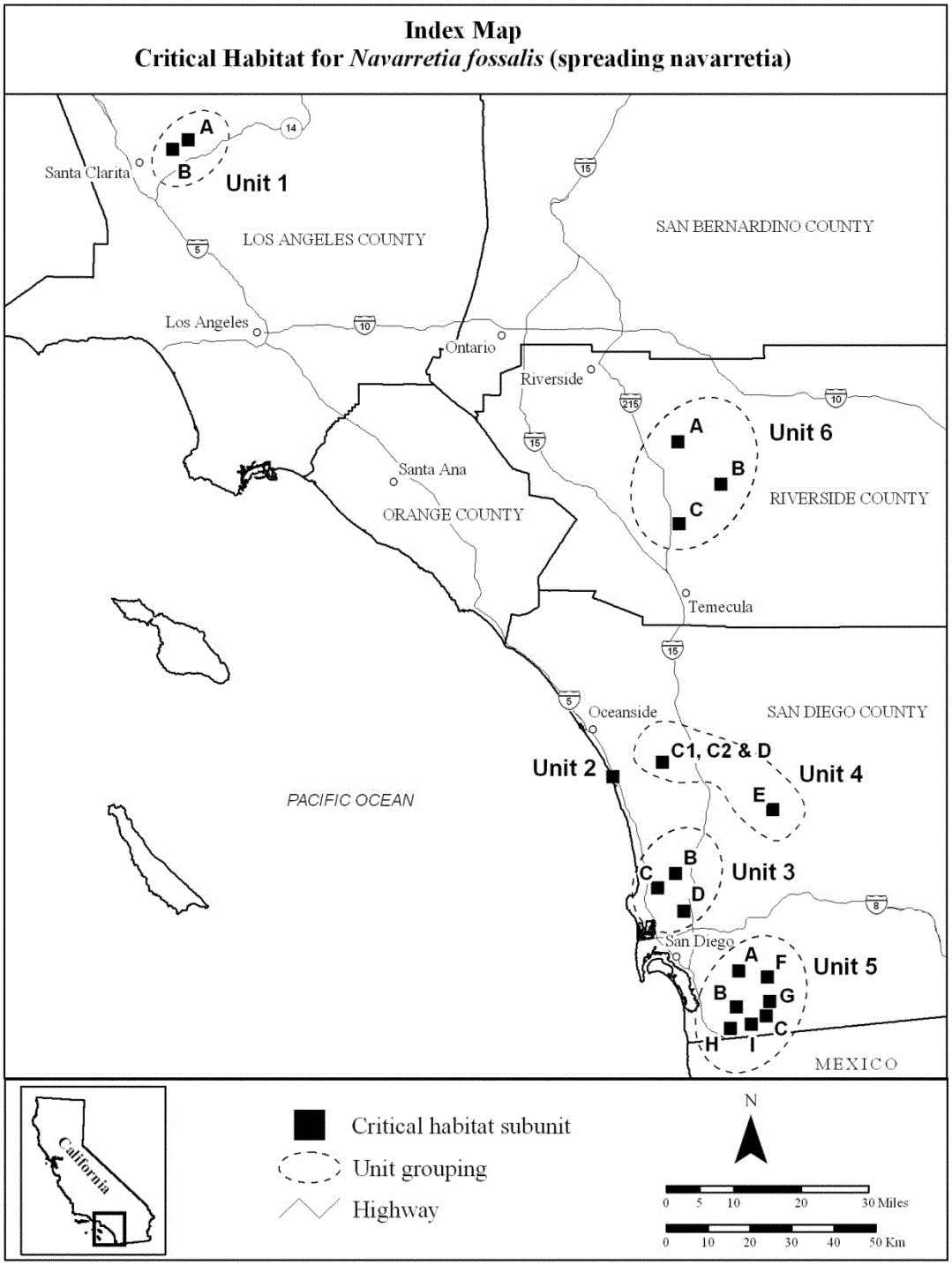
(iii) PCE 3—*Soils that support ponding during winter and spring.* Soils found in areas characterized in PCEs 1 and 2 that have a clay component or other property that creates an impermeable surface or subsurface layer. These soil types include, but are not limited to: Cieneba-Pismo-Caperton soils in Los Angeles County; Domino, Traver, Waukena, Chino, and Willows soils in Riverside County; and Huerhuero, Placentia, Olivenhain, Stockpen, and Redding soils in San Diego County.

(3) Critical habitat does not include manmade structures existing on the effective date of this rule and not containing one of more of the primary constituent elements, such as buildings, aqueducts, airports, and roads, and the land on which such structures are located.

(4) *Critical habitat map units.* Data layers defining map units were created using a base of U.S. Geological Survey 7.5' quadrangle maps. Critical habitat units were then mapped using Universal Transverse Mercator (UTM) zone 11, North American Datum (NAD) 1983 coordinates.

(5) *Note*: Index Map of critical habitat units for *Navarretia fossalis* (spreading navarretia) follows:

BILLING CODE 4310–55–S



(6) Unit 1: Los Angeles Basin–Orange Management Area, Los Angeles County, CA. Subunit 1A: Cruzan Mesa.

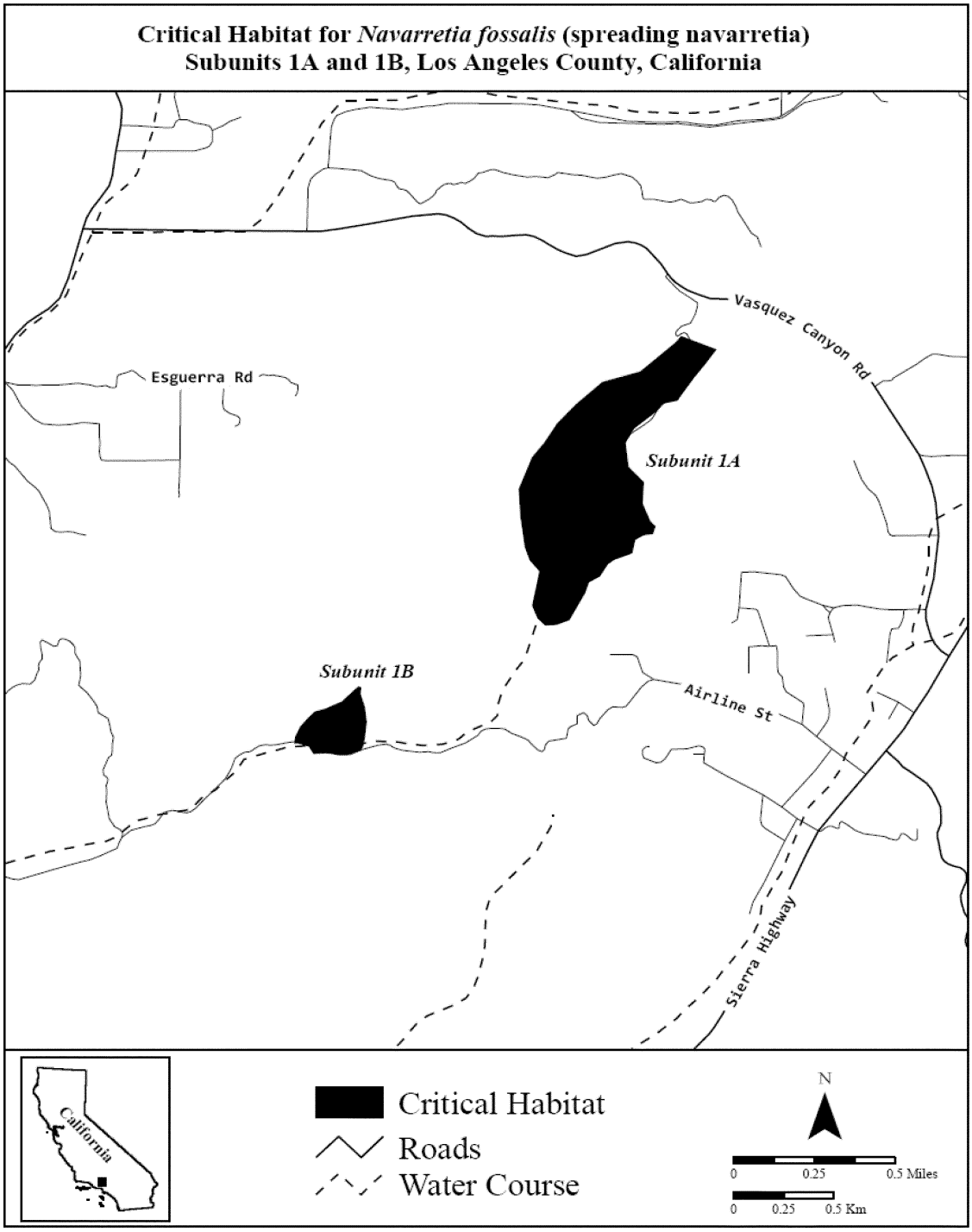
(i) From USGS 1:24,000 quadrangle Mint Canyon. Land bounded by the following Universal Transverse Mercator (UTM) North American Datum of 1983 (NAD83) coordinates (E, N): 367454, 3813696; 367493, 3813876; 367443, 3813933; 367418, 3814003; 367396, 3814159; 367387, 3814304; 367454, 3814474; 367517, 3814549; 367580, 3814651; 367676, 3814752; 367807, 3814866; 367996, 3814923; 368172, 3815075; 368198, 3815107; 368375, 3815036; 368318, 3814957; 368262, 3814889; 368198, 3814795; 368181, 3814768; 368108, 3814754; 368073, 3814710; 367963, 3814624; 367921, 3814549; 367938, 3814421; 368014, 3814343; 368006, 3814230; 368048, 3814134; 368070, 3814110; 368060, 3814070; 368014, 3814065; 367972, 3814041; 367955, 3813970; 367935, 3813962; 367866, 3813938; 367834, 3813913; 367795, 3813849; 367740, 3813818; 367720, 3813762; 367640, 3813619; 367577, 3813595; 367520, 3813592; 367481, 3813628; 367454, 3813696; thence returning to 367454, 3813696.

(ii) *Note:* Map of Subunit 1A (Cruzan Mesa) is provided at paragraph (7)(ii) of this entry.

(7) Unit 1: Los Angeles Basin–Orange Management Area, Los Angeles County, CA. Subunit 1B: Plum Canyon.

(i) From USGS 1:24,000 quadrangle Mint Canyon. Land bounded by the following UTM NAD83 coordinates (E, N): 366405, 3812925; 366364, 3812918; 366339, 3812957; 366287, 3812974; 366266, 3812973; 366271, 3813010; 366295, 3813063; 366333, 3813106; 366370, 3813141; 366424, 3813157; 366448, 3813168; 366505, 3813193; 366585, 3813271; 366601, 3813269; 366600, 3813233; 366619, 3813163; 366628, 3813088; 366619, 3813004; 366612, 3812959; 366602, 3812939; 366532, 3812913; 366490, 3812911; 366441, 3812920; 366405, 3812925; thence returning to 366405, 3812925.

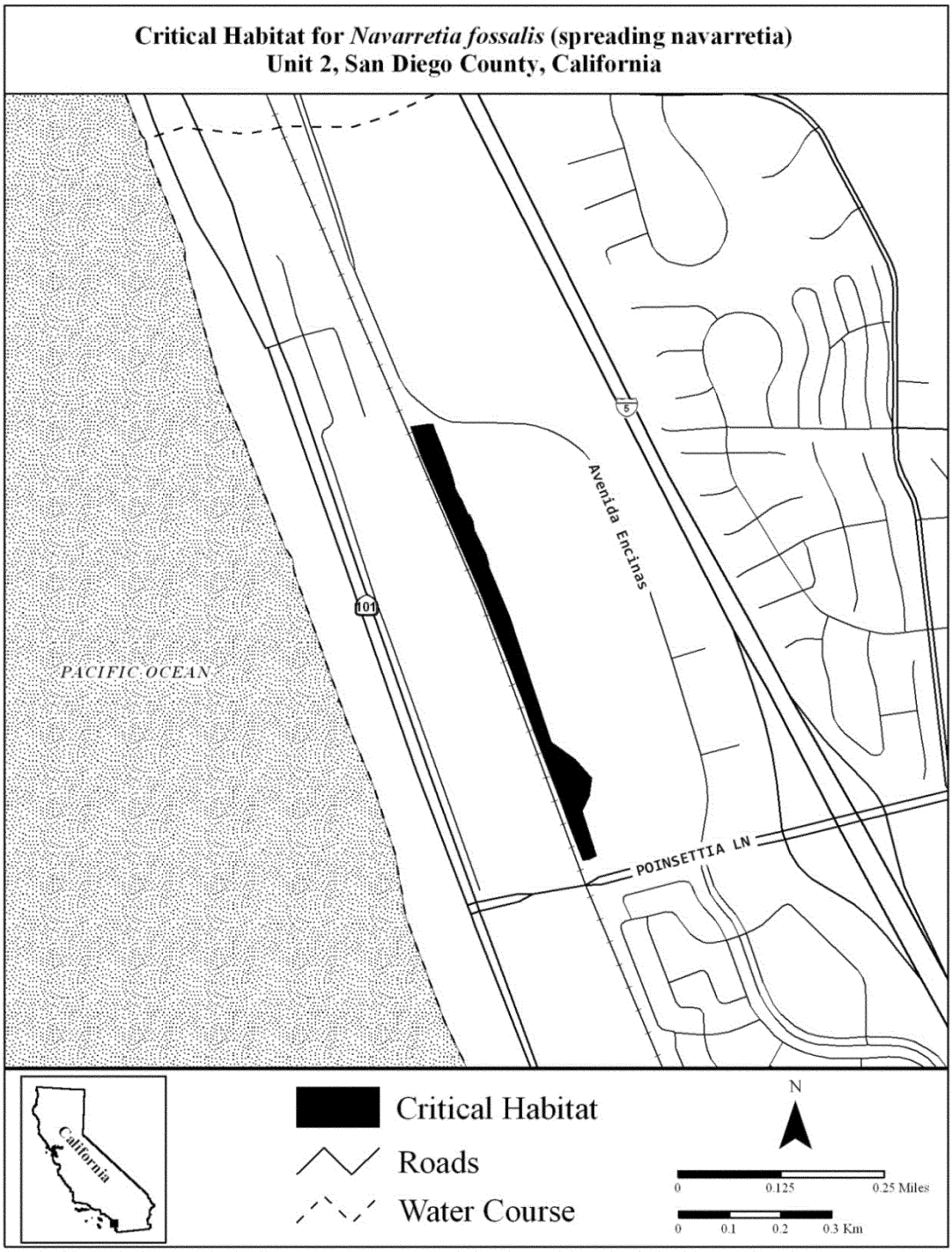
(ii) *Note:* Map of Unit 1, Subunits 1A (Cruzan Mesa) and 1B (Plum Canyon) follows:



(8) Unit 2: San Diego: Northern Coastal Mesa Management Area—Poinsettia Lane Commuter Station, San Diego County, CA.

(i) From USGS 1:24,000 quadrangle Encinitas. Land bounded by the following UTM NAD83 coordinates (E, N): 470268, 3663409; 470278, 3663384; 470281, 3663385; 470287, 3663371; 470291, 3663351; 470291, 3663350; 470312, 3663306; 470317, 3663288; 470319, 3663280; 470359, 3663184; 470392, 3663084; 470440, 3662935; 470487, 3662900; 470520, 3662863; 470515, 3662828; 470501, 3662798; 470529, 3662710; 470522, 3662706; 470515, 3662703; 470501, 3662700; 470476, 3662766; 470454, 3662825; 470429, 3662892; 470404, 3662960; 470386, 3663008; 470368, 3663055; 470361, 3663075; 470296, 3663238; 470184, 3663499; 470163, 3663558; 470195, 3663563; 470209, 3663563; 470210, 3663559; 470213, 3663548; 470223, 3663527; 470234, 3663498; 470242, 3663476; 470248, 3663458; 470251, 3663445; 470251, 3663440; 470260, 3663420; 470264, 3663415; thence returning to 470268, 3663409.

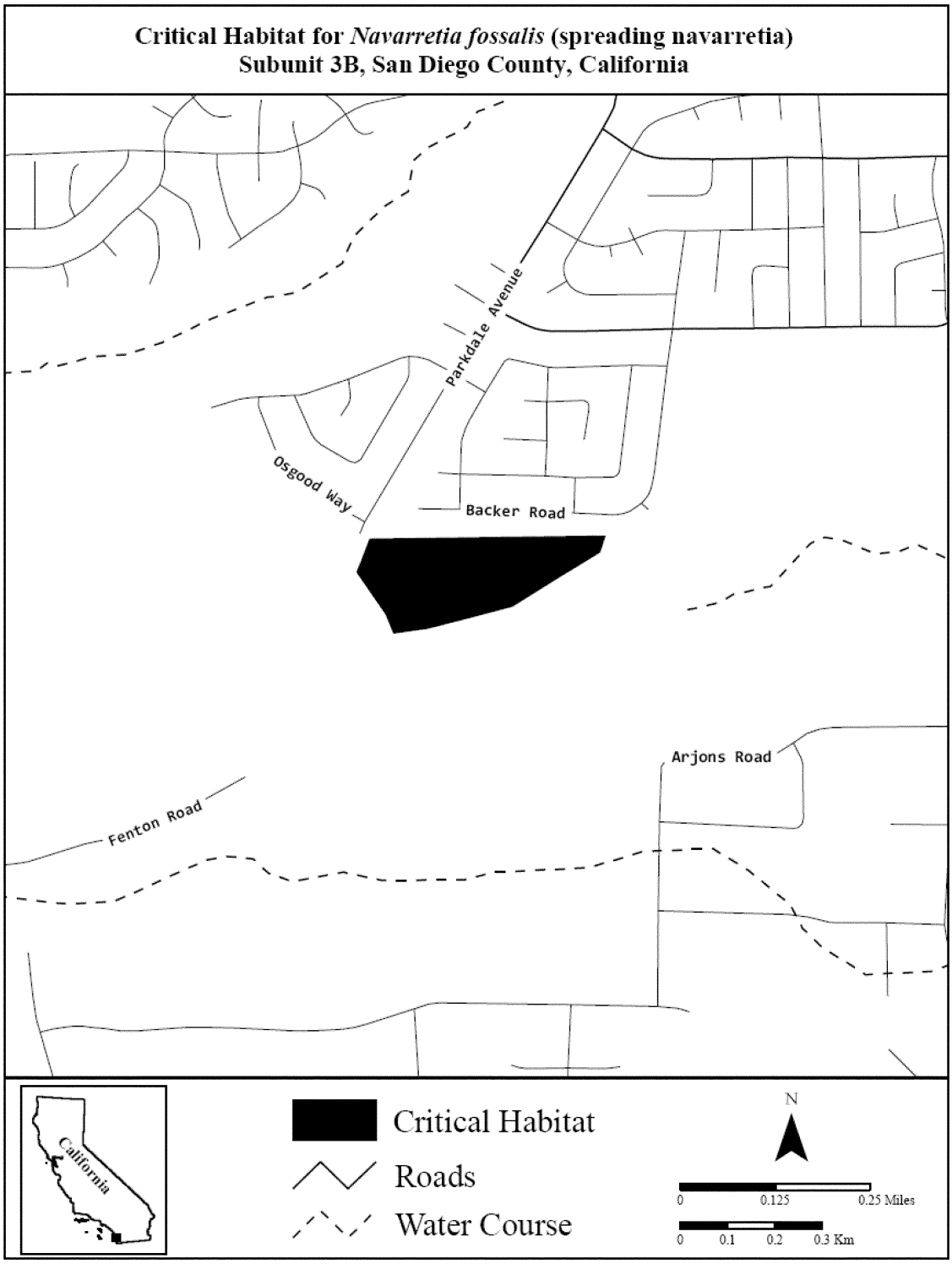
(ii) *Note:* Map of Unit 2 (Poinsettia Lane Commuter Station) follows:



(9) Unit 3: San Diego: Central Coastal Mesa Management Area, San Diego County, CA. Subunit 3B: Carroll Canyon.

(i) From USGS 1:24,000 quadrangle Del Mar. Land bounded by the following UTM NAD83 coordinates (E, N): 485008, 3639919; 485017, 3639943; 485017, 3639943; 485018, 3639947; 485035, 3639991; 485533, 3639996; 485537, 3639996; 485537, 3639996; 485525, 3639961; 485476, 3639931; 485440, 3639908; 485440, 3639908; 485338, 3639845; 485223, 3639815; 485221, 3639814; 485179, 3639804; 485179, 3639803; 485158, 3639798; 485086, 3639788; 485070, 3639828; 485008, 3639919; thence returning to 485008, 3639919.

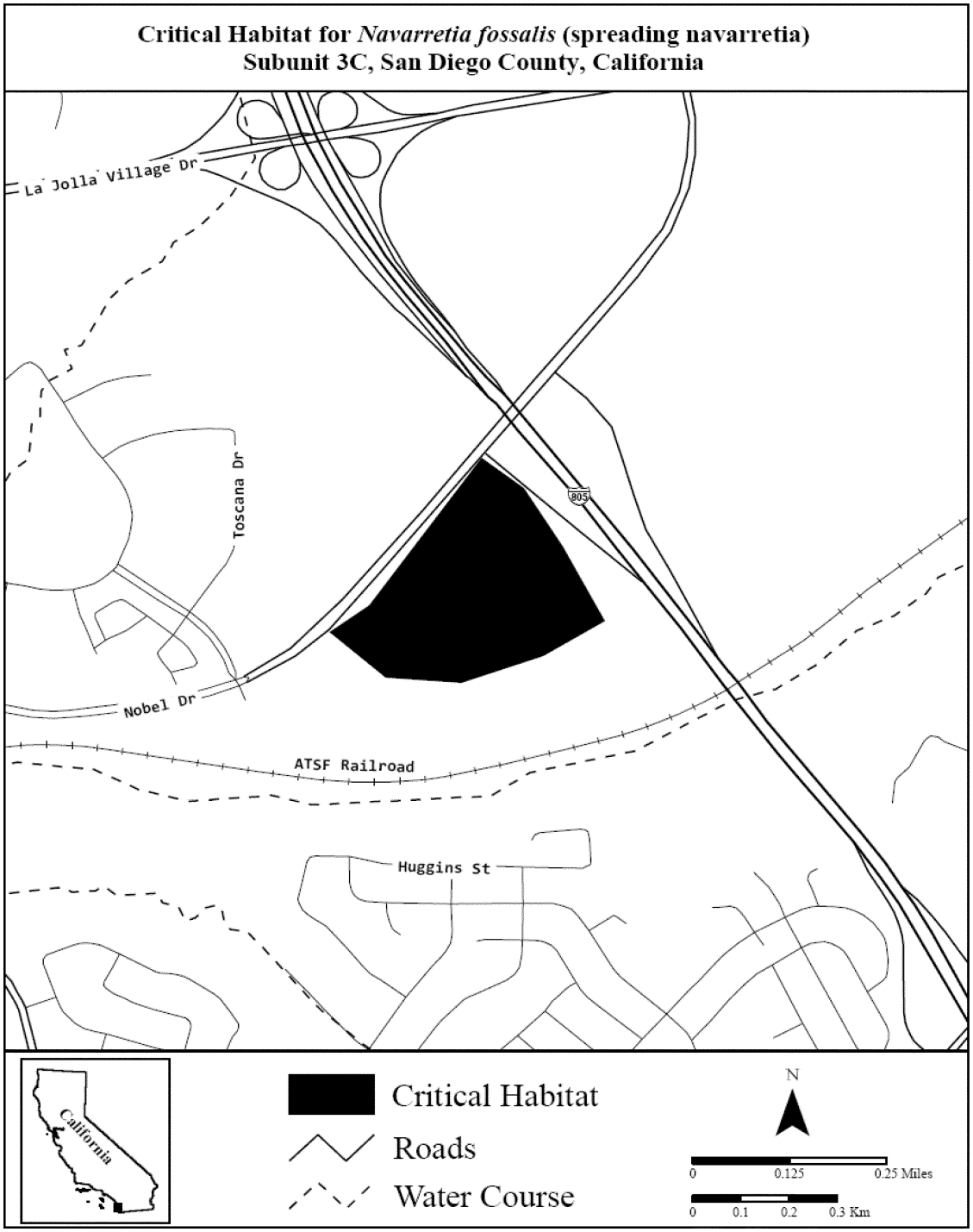
(ii) *Note*: Map of Unit 3, Subunit 3B (Carroll Canyon) follows:



(10) Unit 3: San Diego: Central Coastal Mesa Management Area, San Diego County, CA. Subunit 3C: Nobel Drive.

(i) From USGS 1:24,000 quadrangle La Jolla. Land bounded by the following UTM NAD83 coordinates (E, N): 481837, 3636331; 481667, 3636273; 481510, 3636284; 481409, 3636370; 481393, 3636384; 481475, 3636442; 481708, 3636763; 481796, 3636699; 481797, 3636697; 481797, 3636697; 481877, 3636570; 481965, 3636407; 481837, 3636331; thence returning to 481837, 3636331.

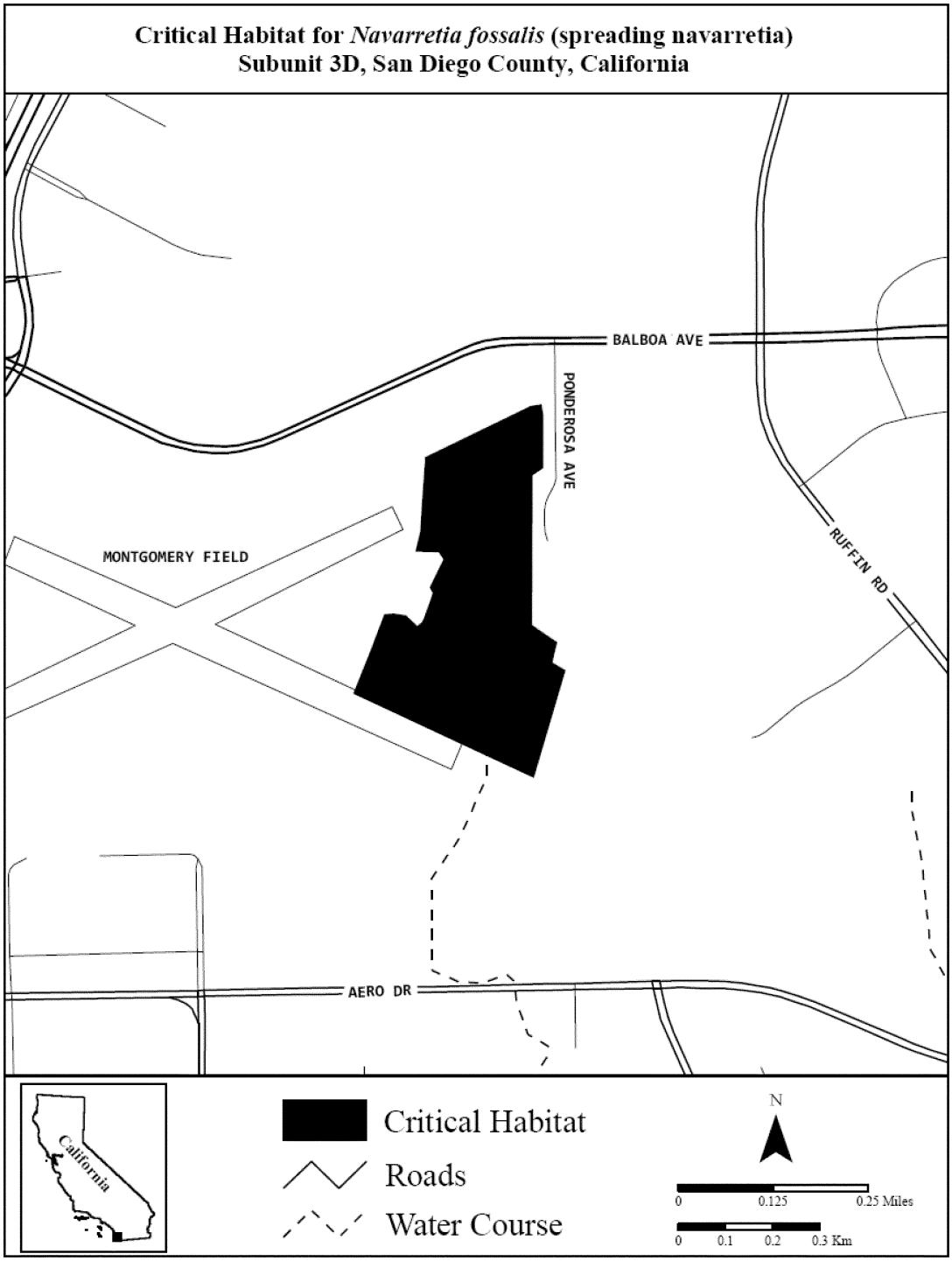
(ii) *Note*: Map of Unit 3, Subunit 3C (Nobel Drive) follows:



(11) Unit 3: San Diego: Central Coastal Mesa Management Area, San Diego County, CA. Subunit 3D: Montgomery Field.

(i) From USGS 1:24,000 quadrangle La Jolla. Land bounded by the following UTM NAD83 coordinates (E, N): 487573, 3630977; 487591, 3630964; 487627, 3630940; 487619, 3630908; 487617, 3630896; 487645, 3630880; 487577, 3630651; 487447, 3630712; 487233, 3630813; 487194, 3630830; 487232, 3630926; 487248, 3630966; 487260, 3630999; 487281, 3631001; 487306, 3630997; 487327, 3630977; 487330, 3630975; 487334, 3630978; 487336, 3630979; 487341, 3630983; 487343, 3630991; 487359, 3631033; 487363, 3631045; 487361, 3631049; 487357, 3631057; 487377, 3631099; 487386, 3631117; 487376, 3631131; 487375, 3631131; 487326, 3631133; 487336, 3631175; 487340, 3631237; 487346, 3631328; 487347, 3631333; 487384, 3631352; 487437, 3631378; 487571, 3631443; 487594, 3631446; 487598, 3631422; 487598, 3631310; 487575, 3631296; 487573, 3630977; thence returning to 487573, 3630977.

(ii) *Note*: Map of Unit 3, Subunit 3D (Montgomery Field) follows:



(12) Unit 4: San Diego: Inland Management Area, San Diego County, CA. Subunit 4C1: San Marcos (Upham).

(i) From USGS 1:24,000 quadrangle San Marcos. Land bounded by the following UTM NAD83 coordinates (E, N): 481857, 3666532; 481841, 3666524; 481458, 3666685; 481587, 3666988; 481974, 3666823; 481857, 3666532; thence returning to 481857, 3666532.

(ii) *Note*: Map of Unit 4, Subunit 4C1 is provided at paragraph (14)(ii) of this entry.

(13) Unit 4: San Diego: Inland Management Area, San Diego County, CA. Subunit 4C2: San Marcos (Universal Boot).

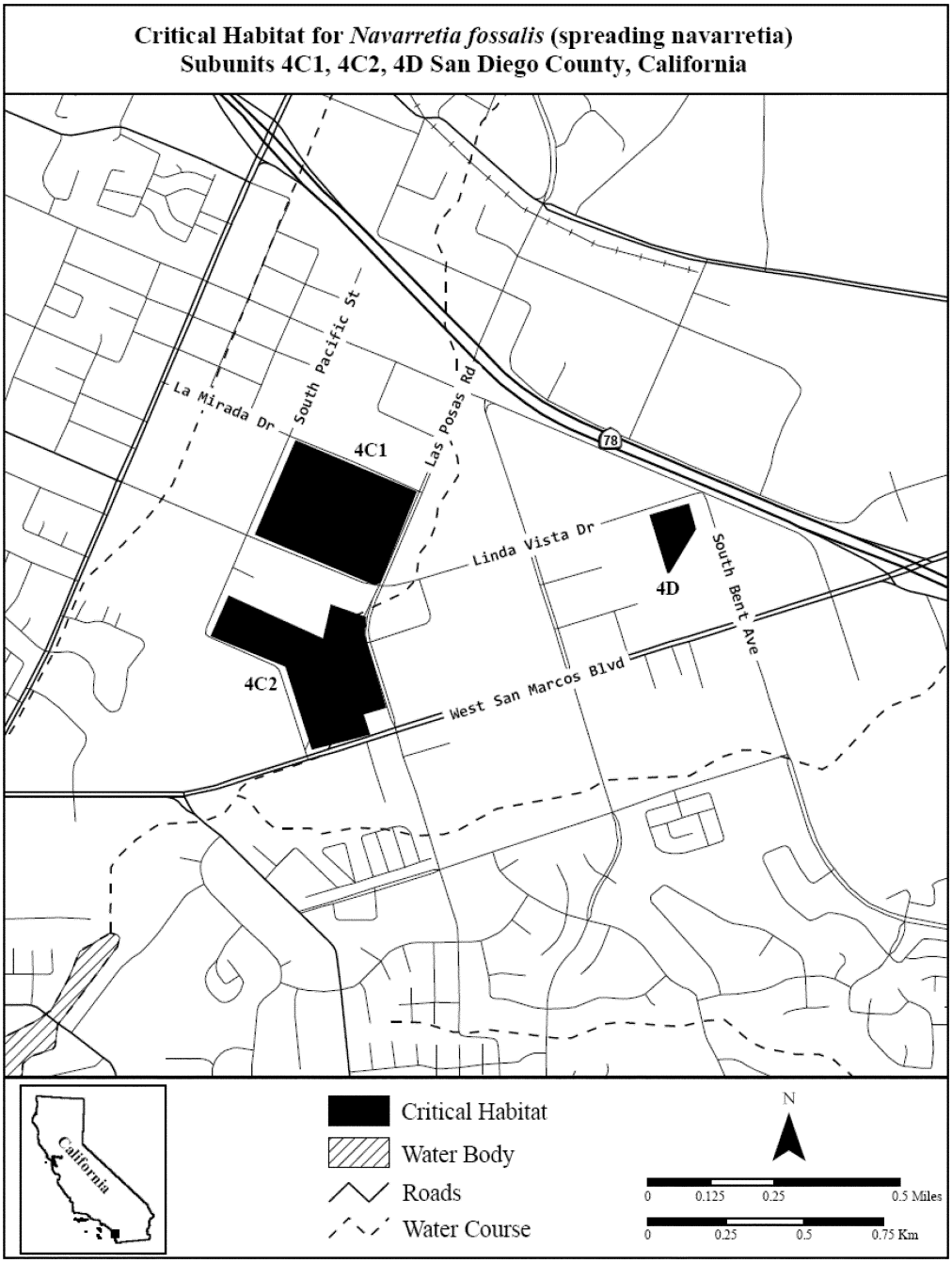
(i) From USGS 1:24,000 quadrangle San Marcos. Land bounded by the following UTM NAD83 coordinates (E, N): 481373, 3666492; 481676, 3666355; 481700, 3666464; 481813, 3666423; 481809, 3666367; 481877, 3666133; 481805, 3666113; 481825, 3666048; 481669, 3666007; 481641, 3666000; 481639, 3666000; 481639, 3666002; 481618, 3666066; 481555, 3666266; 481317, 3666363; 481373, 3666492; thence returning to 481373, 3666492.

(ii) *Note*: Map of Unit 4, Subunit 4C2 is provided at paragraph (14)(ii) of this entry.

(14) Unit 4: San Diego: Inland Management Area, San Diego County, CA. Subunit 4D: San Marcos (Bent Avenue).

(i) From USGS 1:24,000 quadrangle San Marcos. Land bounded by the following UTM NAD83 coordinates (E, N): 482781, 3666563; 482772, 3666562; 482716, 3666750; 482842, 3666785; 482865, 3666703; 482781, 3666563; thence returning to 482781, 3666563.

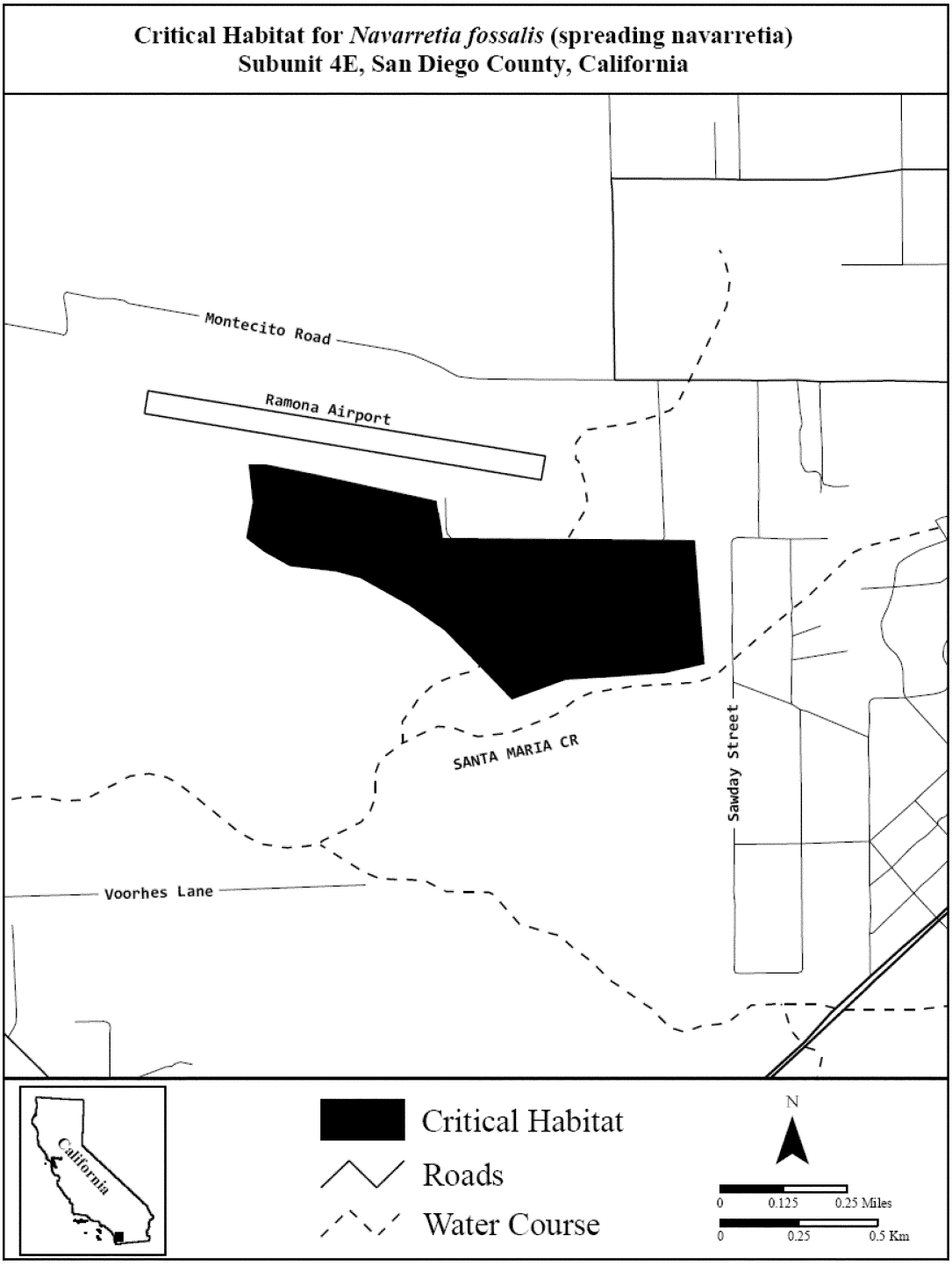
(ii) *Note*: Map of Unit 4, Subunits 4C1, 4C2, and 4D (San Marcos) follows:



(15) Unit 4: San Diego: Inland Management Area, San Diego County, CA. Subunit 4E: Ramona.

(i) From USGS 1:24,000 quadrangle San Pasqual. Land bounded by the following UTM NAD83 (E, N): 508768, 3654813; 508597, 3654751; 508493, 3654857; 508382, 3654971; 508373, 3654977; 508373, 3654977; 508366, 3654982; 508357, 3654989; 508270, 3655050; 508115, 3655137; 508036, 3655159; 507889, 3655176; 507807, 3655222; 507750, 3655265; 507772, 3655380; 507758, 3655500; 507813, 3655500; 507965, 3655470; 508357, 3655383; 508363, 3655347; 508363, 3655345; 508375, 3655275; 508376, 3655265; 509073, 3655260; 509073, 3655260; 509073, 3655260; 509180, 3655257; 509181, 3655234; 509181, 3655233; 509209, 3654862; 509082, 3654835; 508896, 3654822; 508768, 3654813; thence returning to 508768, 3654813.

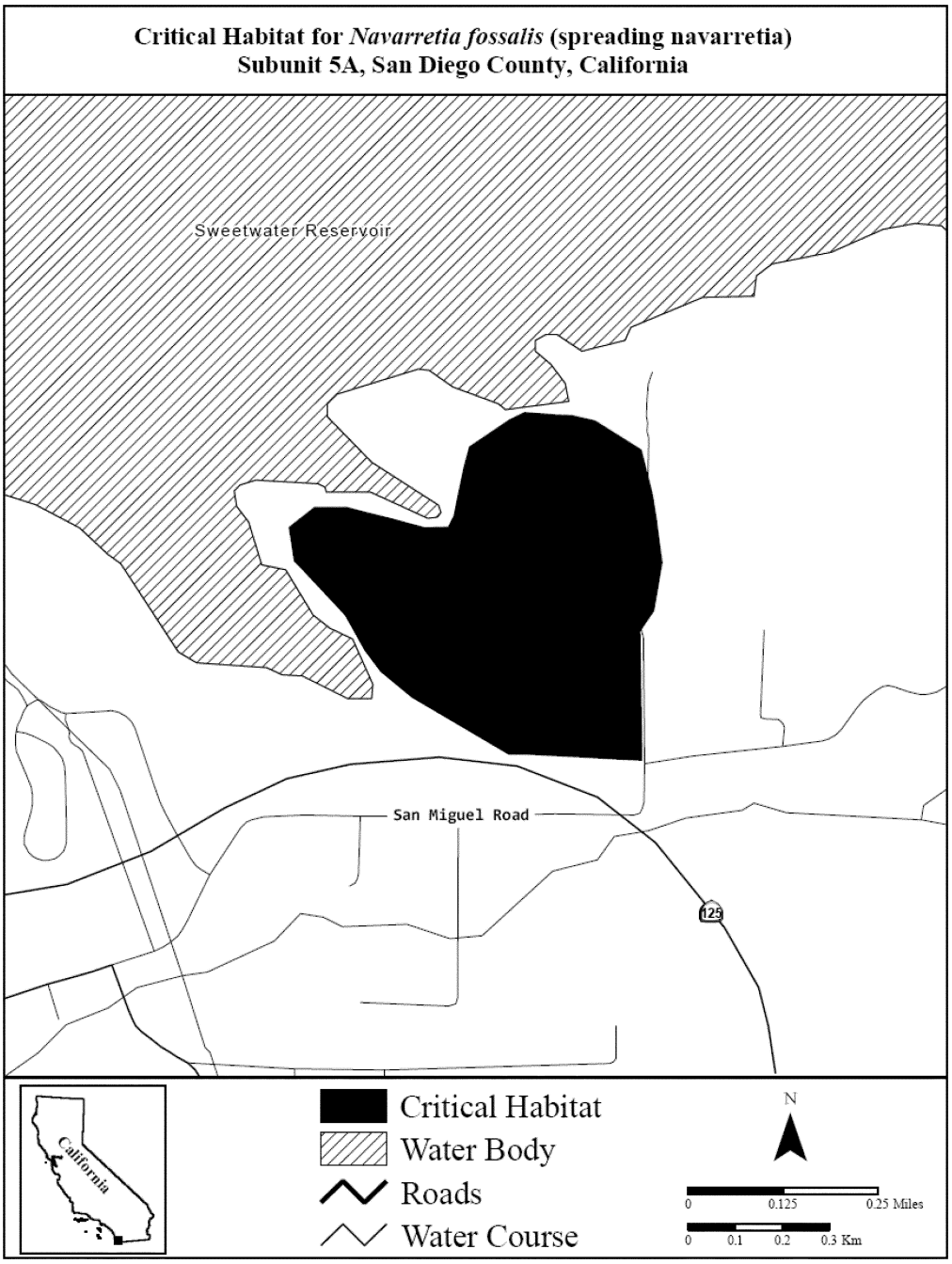
(ii) *Note*: Map of Unit 4, Subunit 4E (Ramona) follows:



(16) Unit 5: San Diego: Southern Coastal Mesa Management Area, San Diego County, CA. Subunit 5A: Sweetwater Vernal Pools.

(i) From USGS 1:24,000 quadrangle Jamul Mountains. Land bounded by the following UTM NAD83 coordinates (E, N): 501084, 3616605; 501096, 3616520; 501078, 3616418; 501054, 3616382; 501054, 3616382; 501051, 3616377; 501051, 3616376; 501051, 3616376; 501051, 3616376; 501049, 3616374; 501052, 3616122; 501052, 3616122; 501052, 3616121; 501053, 3616099; 501005, 3616101; 501004, 3616101; 501002, 3616102; 500915, 3616106; 500913, 3616107; 500913, 3616107; 500814, 3616112; 500775, 3616112; 500775, 3616112; 500775, 3616112; 500769, 3616112; 500562, 3616233; 500497, 3616288; 500462, 3616334; 500436, 3616380; 500420, 3616409; 500402, 3616428; 500327, 3616508; 500312, 3616524; 500300, 3616596; 500356, 3616639; 500425, 3616639; 500468, 3616628; 500511, 3616617; 500591, 3616596; 500640, 3616597; 500651, 3616619; 500670, 3616713; 500671, 3616718; 500685, 3616767; 500770, 3616826; 500802, 3616841; 500872, 3616836; 500903, 3616834; 500952, 3616822; 501051, 3616760; 501075, 3616669; 501075, 3616667; 501076, 3616663; 501084, 3616607; 501084, 3616605; 501084, 3616605; thence returning to 501084, 3616605.

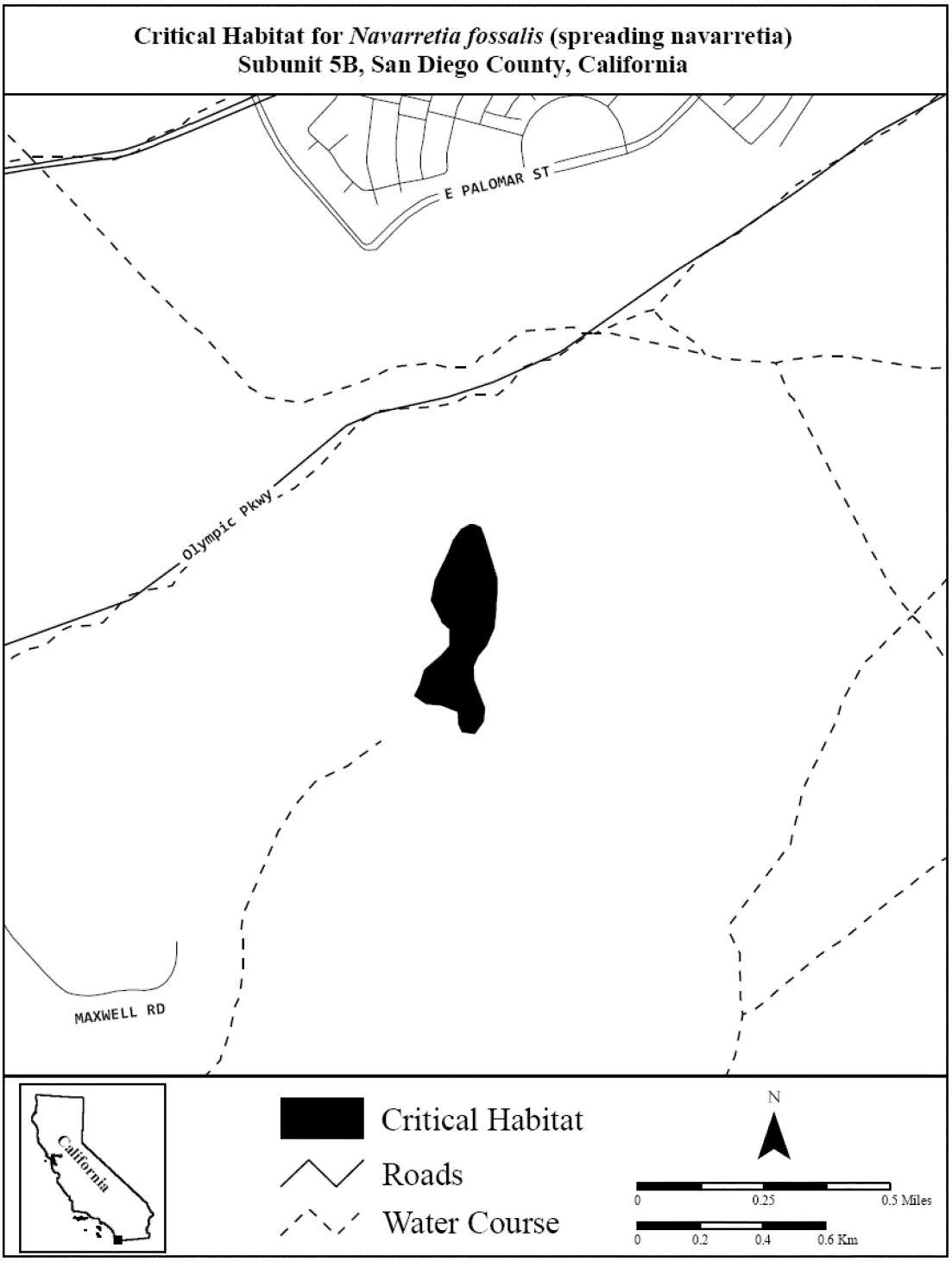
(ii) *Note*: Map of Unit 5, Subunit 5A (Sweetwater Vernal Pools) follows:



(17) Unit 5: San Diego: Southern Coastal Mesa Management Area, San Diego County, CA. Subunit 5B: Otay River Valley.

(i) From USGS 1:24,000 quadrangles Imperial Beach and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 499953, 3607783; 499924, 3607743; 499882, 3607749; 499871, 3607775; 499868, 3607814; 499815, 3607834; 499768, 3607839; 499731, 3607866; 499747, 3607899; 499762, 3607949; 499818, 3607996; 499843, 3608025; 499843, 3608079; 499818, 3608100; 499815, 3608107; 499784, 3608170; 499796, 3608236; 499838, 3608323; 499855, 3608364; 499880, 3608400; 499909, 3608415; 499921, 3608415; 499944, 3608404; 499957, 3608370; 499997, 3608238; 499997, 3608196; 499994, 3608161; 499992, 3608144; 499988, 3608082; 499962, 3608026; 499936, 3607993; 499920, 3607960; 499923, 3607916; 499939, 3607872; 499957, 3607827; 499953, 3607783; thence returning to 499953, 3607783.

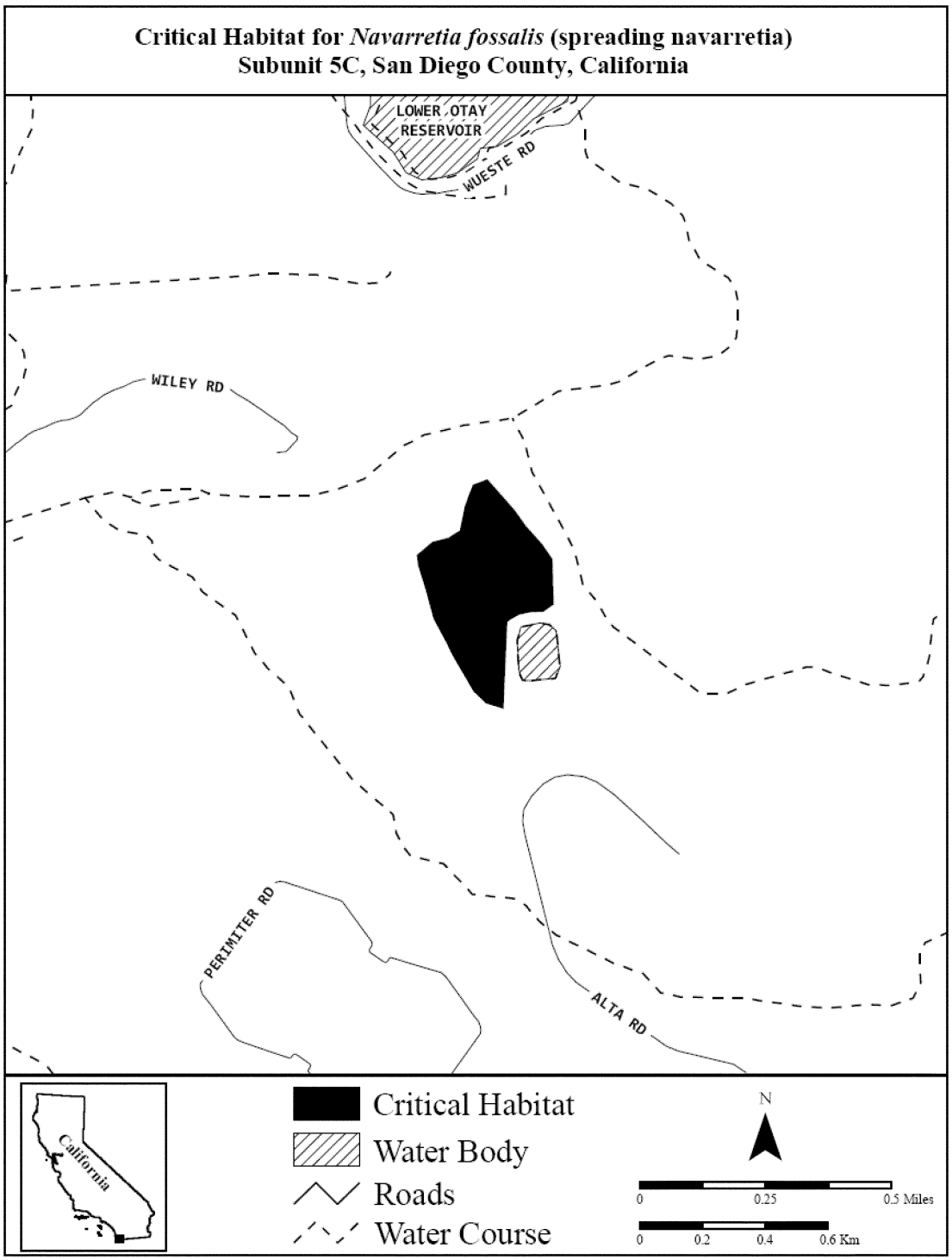
(ii) *Note*: Map of Unit 5, Subunit 5B (Otay River Valley) follows:



(18) Unit 5: San Diego: Southern Coastal Mesa Management Area, San Diego County, CA. Subunit 5C: Otay Mesa.

(i) From USGS 1:24,000 quadrangle Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 506759, 3606253; 506757, 3606201; 506702, 3606219; 506663, 3606258; 506601, 3606362; 506590, 3606382; 506575, 3606411; 506575, 3606411; 506535, 3606490; 506509, 3606580; 506503, 3606601; 506485, 3606661; 506481, 3606693; 506531, 3606734; 506581, 3606748; 506599, 3606760; 506600, 3606760; 506617, 3606771; 506634, 3606848; 506641, 3606869; 506642, 3606870; 506660, 3606918; 506706, 3606936; 506750, 3606885; 506777, 3606855; 506777, 3606854; 506792, 3606837; 506829, 3606785; 506880, 3606730; 506913, 3606679; 506915, 3606602; 506915, 3606597; 506918, 3606535; 506901, 3606523; 506901, 3606523; 506885, 3606512; 506841, 3606510; 506807, 3606502; 506776, 3606485; 506776, 3606485; 506768, 3606480; 506768, 3606473; 506768, 3606473; 506759, 3606253; 506759, 3606253; thence returning to 506759, 3606253.

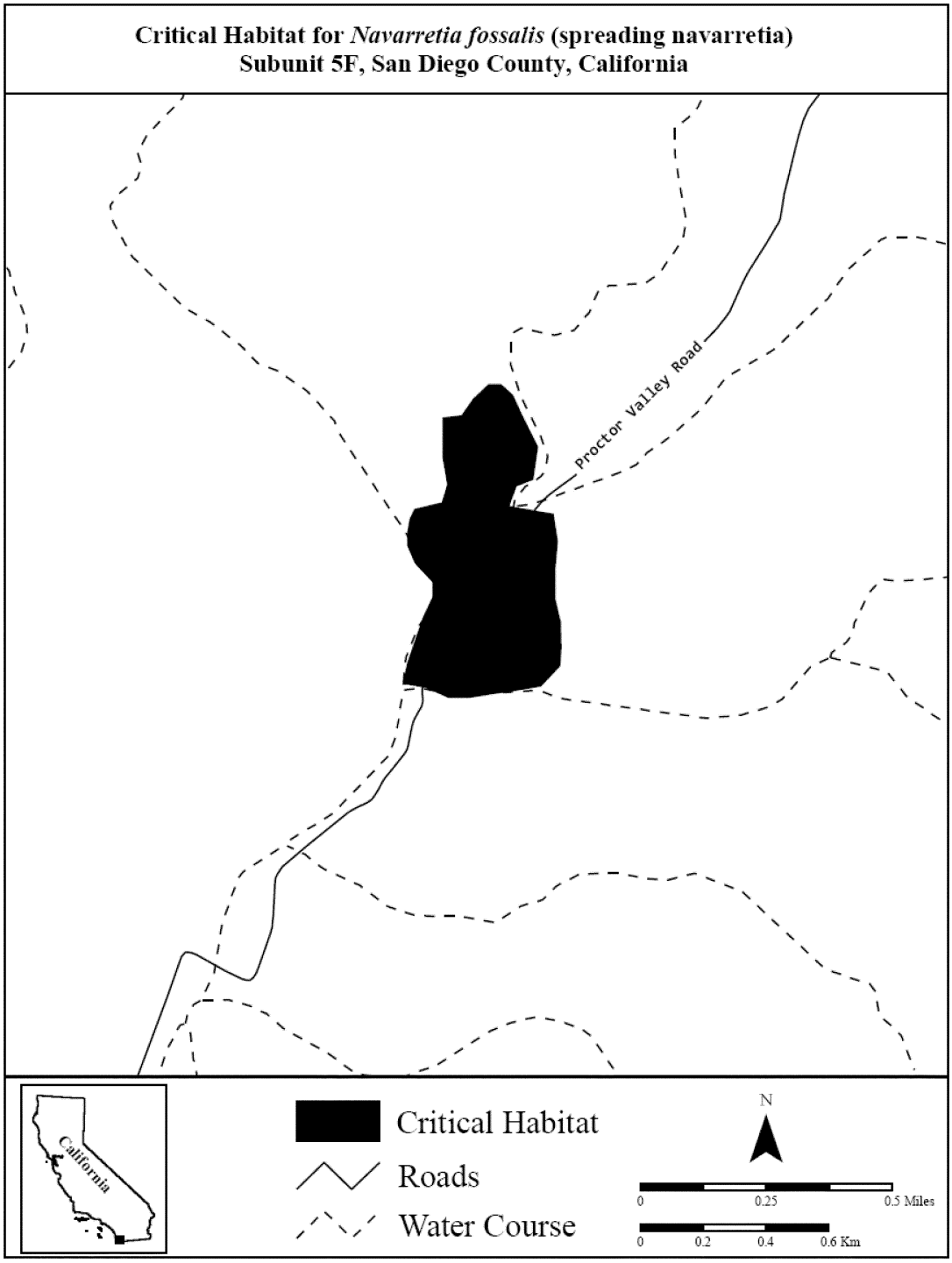
(ii) *Note*: Map of Unit 5, Subunit 5C (Otay Mesa) follows:



(19) Unit 5: San Diego: Southern Coastal Mesa Management Area, San Diego County, CA. Subunit 5F: Proctor Valley.

(i) From USGS 1:24,000 quadrangle Jamul Mountains. Land bounded by the following UTM NAD83 coordinates (E, N): 507676, 3615007; 507616, 3614943; 507548, 3614930; 507458, 3614918; 507386, 3614907; 507320, 3614907; 507247, 3614939; 507190, 3614947; 507173, 3614947; 507188, 3615018; 507239, 3615163; 507269, 3615226; 507269, 3615275; 507213, 3615335; 507188, 3615393; 507188, 3615433; 507194, 3615465; 507194, 3615465; 507194, 3615465; 507196, 3615476; 507211, 3615508; 507298, 3615529; 507316, 3615587; 507301, 3615676; 507301, 3615723; 507301, 3615800; 507362, 3615808; 507402, 3615865; 507403, 3615866; 507448, 3615906; 507488, 3615906; 507526, 3615872; 507556, 3615806; 507605, 3615706; 507590, 3615601; 507537, 3615580; 507514, 3615518; 507556, 3615510; 507654, 3615493; 507669, 3615405; 507661, 3615318; 507661, 3615220; 507674, 3615164; 507678, 3615148; 507680, 3615073; 507679, 3615062; 507679, 3615062; 507679, 3615062; 507676, 3615007; thence returning to 507676, 3615007.

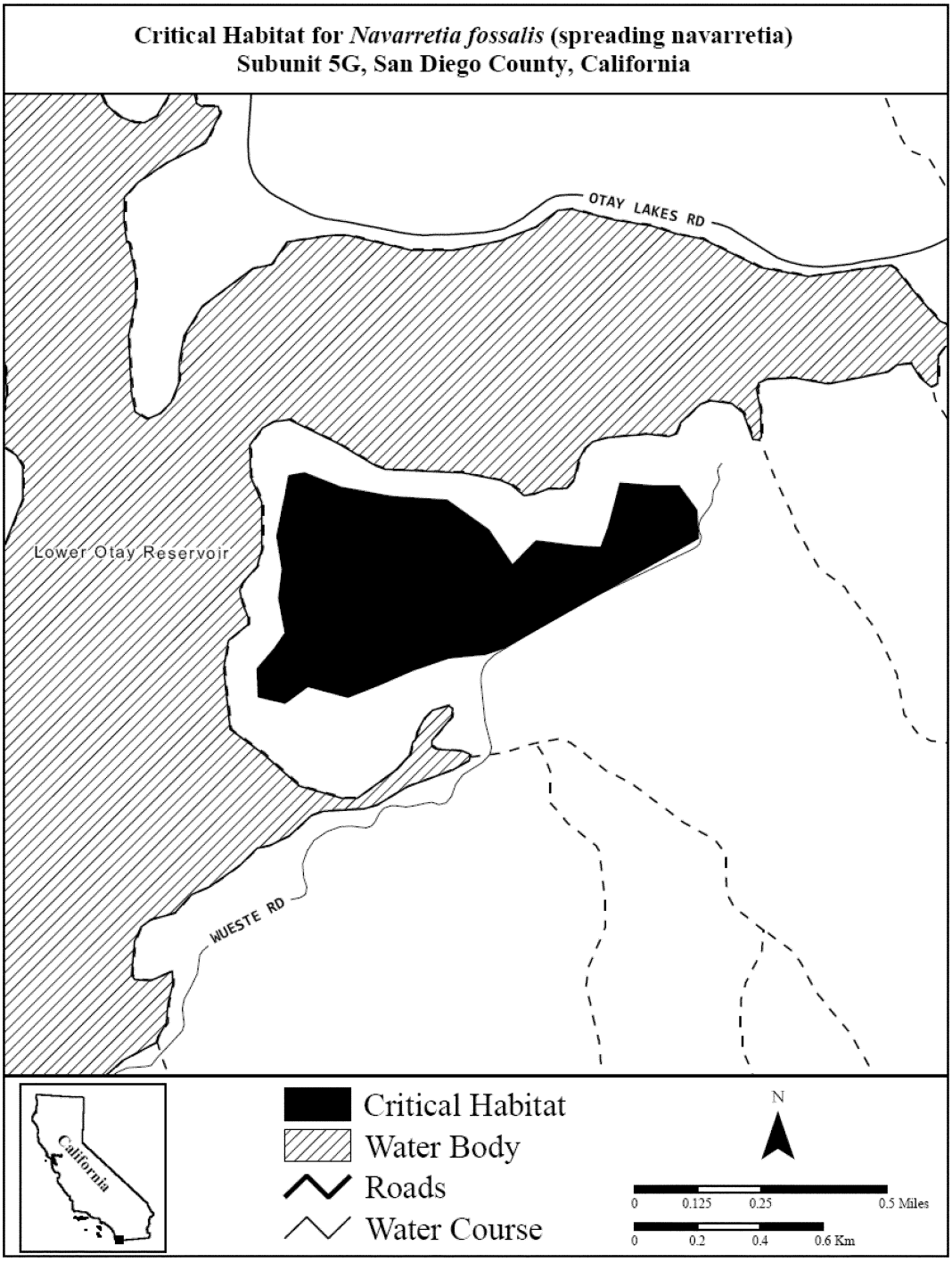
(ii) *Note*: Map of Unit 5, Subunit 5F (Proctor Valley) follows:



(20) Unit 5: San Diego: Southern Coastal Mesa Management Area, San Diego County, CA. Subunit 5G: Otay Lakes.

(i) From USGS 1:24,000 quadrangles Jamul Mountains and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 508045, 3609784; 508120, 3609675; 508188, 3609745; 508194, 3609751; 508316, 3609736; 508337, 3609733; 508400, 3609730; 508423, 3609791; 508450, 3609898; 508460, 3609936; 508570, 3609926; 508651, 3609926; 508671, 3609898; 508672, 3609897; 508707, 3609847; 508714, 3609756; 508646, 3609718; 508323, 3609536; 508199, 3609465; 508094, 3609406; 508033, 3609385; 507917, 3609374; 507800, 3609334; 507695, 3609287; 507595, 3609248; 507467, 3609283; 507394, 3609229; 507308, 3609250; 507303, 3609341; 507359, 3609406; 507392, 3609455; 507371, 3609565; 507383, 3609658; 507366, 3609763; 507387, 3609868; 507392, 3609895; 507404, 3609959; 507455, 3609968; 507572, 3609922; 507715, 3609896; 507742, 3609891; 507912, 3609880; 508045, 3609784; thence returning to 508045, 3609784.

(ii) *Note*: Map of Unit 5, Subunit 5G (Otay Lakes) follows:



BILLING CODE 4310–55–C

(21) Unit 5: San Diego: Southern Coastal Mesa Management Area, San Diego County, CA. Subunit 5H: Western Otay Mesa Vernal Pool Complexes.

(i) From USGS 1:24,000 quadrangles Imperial Beach and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 498398, 3601961; 498398, 3601927; 498482, 3601937; 498514, 3601914; 498495, 3601822; 498463, 3601742; 498434, 3601651; 498324, 3601579; 498154, 3601581; 498025, 3601666; 498008, 3601765; 498093, 3601864; 498185, 3601904; 498223, 3601940; 498240, 3602001; 498268, 3602119; 498268, 3602251; 498375, 3602256; 498461, 3602258; 498495, 3602211; 498468, 3602159; 498468, 3602158; 498463, 3602148; 498450, 3602119; 498450, 3602119; 498436, 3602087; 498407, 3602039; 498398, 3601961; thence returning to 498398, 3601961.

(ii) From USGS 1:24,000 quadrangles Imperial Beach and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 497444, 3602605; 497382, 3602601; 497311, 3602614; 497263, 3602633; 497255, 3602688; 497270, 3602708; 497270, 3602708; 497287, 3602732; 497379, 3602732; 497424, 3602725; 497443, 3602708; 497443, 3602707; 497447, 3602704; 497529, 3602702; 497546, 3602702; 497545, 3602698; 497545, 3602698; 497529, 3602651; 497518, 3602636; 497515, 3602631; 497455, 3602606; 497444, 3602605; 497444, 3602605; thence returning to 497444, 3602605.

(iii) From USGS 1:24,000 quadrangles Imperial Beach and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 498002, 3602859; 497981, 3602853; 497930, 3602857; 497929, 3602859; 497911, 3602885; 497934, 3602916; 497946, 3602955; 497985, 3602951; 497981, 3602939; 497985, 3602920; 498000, 3602888; 498012, 3602861; 498002, 3602859; thence returning to 498002, 3602859.

(iv) From USGS 1:24,000 quadrangles Imperial Beach and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 499680, 3603156; 499688, 3603148; 499683, 3603090; 499717, 3603078; 499739, 3603039; 499829, 3603005; 499812, 3602945; 499754, 3602867; 499676, 3602836; 499584, 3602794; 499553, 3602833; 499536, 3602889; 499519, 3602920; 499485, 3602983; 499483, 3603035; 499478, 3603172; 499490, 3603173; 499497, 3603173; 499577, 3603174; 499584, 3603178; 499607, 3603175; 499624, 3603162; 499680, 3603156; thence returning to 499680, 3603156.

(v) From USGS 1:24,000 quadrangles Imperial Beach and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 499158, 3603493; 499170, 3603456; 499130, 3603457; 499083, 3603458; 499083, 3603495; 499075, 3603541; 499070, 3603572; 499121, 3603582; 499130, 3603565; 499141, 3603546; 499158, 3603493; thence returning to 499158, 3603493.

(vi) From USGS 1:24,000 quadrangles Imperial Beach and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 499007, 3603851; 499012, 3603773; 499051, 3603691; 499044, 3603640; 498993, 3603609; 498983, 3603633; 498993, 3603652; 498993, 3603655; 498986, 3603722; 498984, 3603778; 498983, 3603805; 498979, 3603807; 498953, 3603817; 498947, 3603819; 498903, 3603790; 498852, 3603749; 498857, 3603715; 498823, 3603688; 498741, 3603676; 498702, 3603688; 498719, 3603715; 498763, 3603742; 498826, 3603776; 498874, 3603817; 498930, 3603831; 498957, 3603847; 499000, 3603873; 499007, 3603851; thence returning to 499007, 3603851.

(vii) From USGS 1:24,000 quadrangles Imperial Beach and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 499259, 3603894; 499303, 3603885; 499344, 3603890; 499383, 3603892; 499384, 3603882; 499390, 3603749; 499393, 3603531; 499431, 3603514; 499458, 3603487; 499461, 3603449; 499189, 3603449; 499221, 3603587; 499233, 3603618; 499247, 3603633; 499267, 3603642; 499269, 3603664; 499267, 3603679; 499209, 3603701; 499182, 3603768; 499184, 3603807; 499177, 3603877; 499186, 3603886; 499206, 3603907; 499259, 3603894; thence returning to 499259, 3603894.

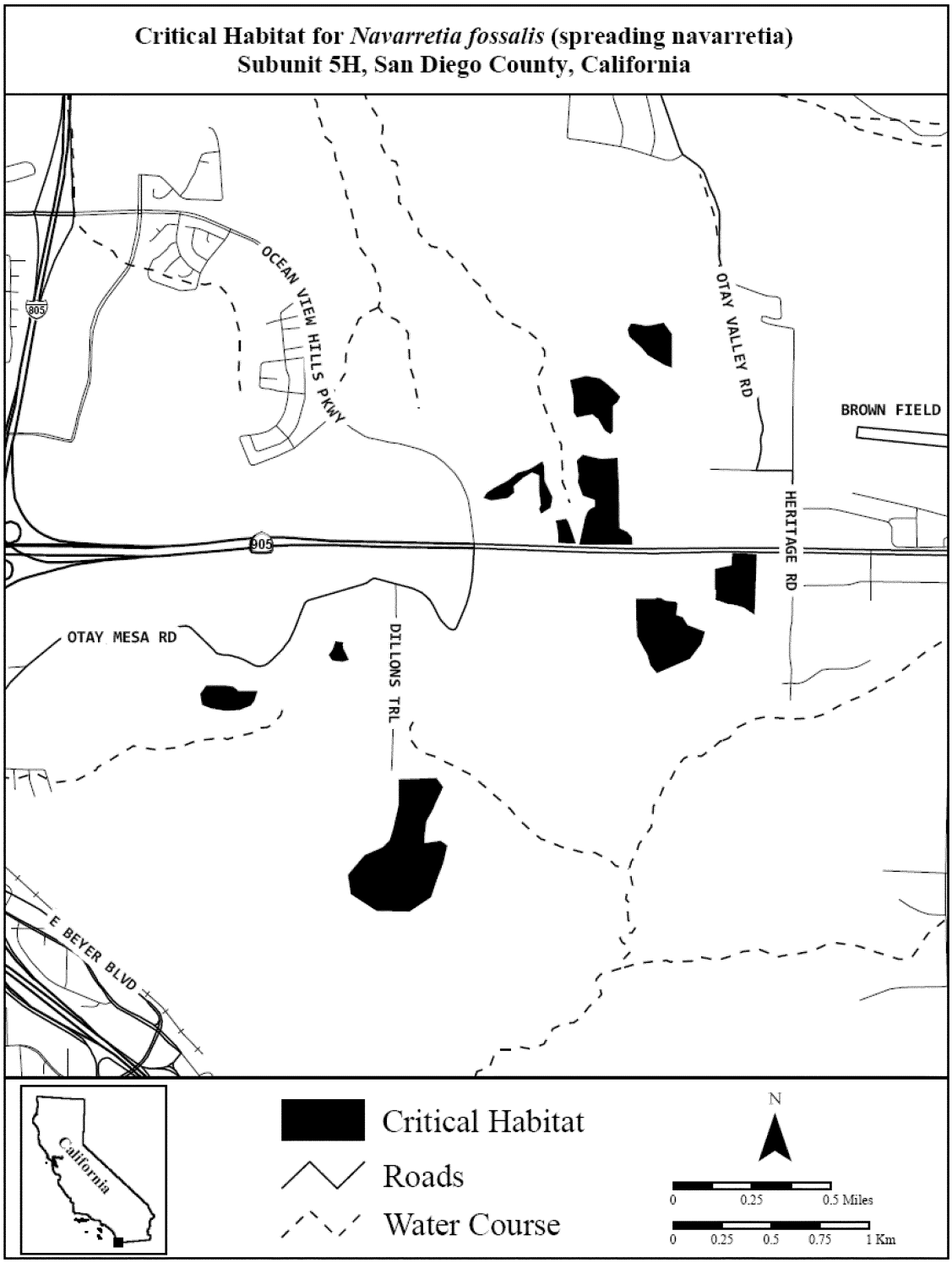
(viii) From USGS 1:24,000 quadrangles Imperial Beach and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 499359, 3604115; 499359, 3604025; 499350, 3604018; 499347, 3604016; 499320, 3604033; 499314, 3604043; 499286, 3604091; 499257, 3604115; 499221, 3604110; 499177, 3604098; 499160, 3604125; 499160, 3604197; 499148, 3604270; 499143, 3604287; 499153, 3604292; 499223, 3604309; 499293, 3604299; 499330, 3604270; 499361, 3604239; 499387, 3604214; 499398, 3604205; 499383, 3604178; 499359, 3604159; 499359, 3604122; 499359, 3604115; thence returning to 499359, 3604115.

(ix) From USGS 1:24,000 quadrangles Imperial Beach and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 499618, 3604583; 499662, 3604524; 499662, 3604352; 499620, 3604367; 499541, 3604418; 499504, 3604459; 499475, 3604484; 499446, 3604510; 499436, 3604546; 499451, 3604575; 499475, 3604575; 499475, 3604575; 499528, 3604566; 499562, 3604568; 499618, 3604583; thence returning to 499618, 3604583.

(x) From USGS 1:24,000 quadrangles Imperial Beach and Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 500083, 3603092; 500026, 3603130; 499985, 3603143; 499944, 3603149; 499903, 3603164; 499898, 3603164; 499885, 3603170; 499886, 3603218; 499880, 3603221; 499880, 3603325; 499949, 3603340; 499967, 3603344; 499969, 3603407; 500093, 3603400; 500083, 3603092; 500083, 3603092; thence returning to 500083, 3603092.

(xi) *Note*: Map of Unit 5, Subunit 5H (Western Otay Mesa Vernal Pool Complexes) follows:

BILLING CODE 4310–55–S



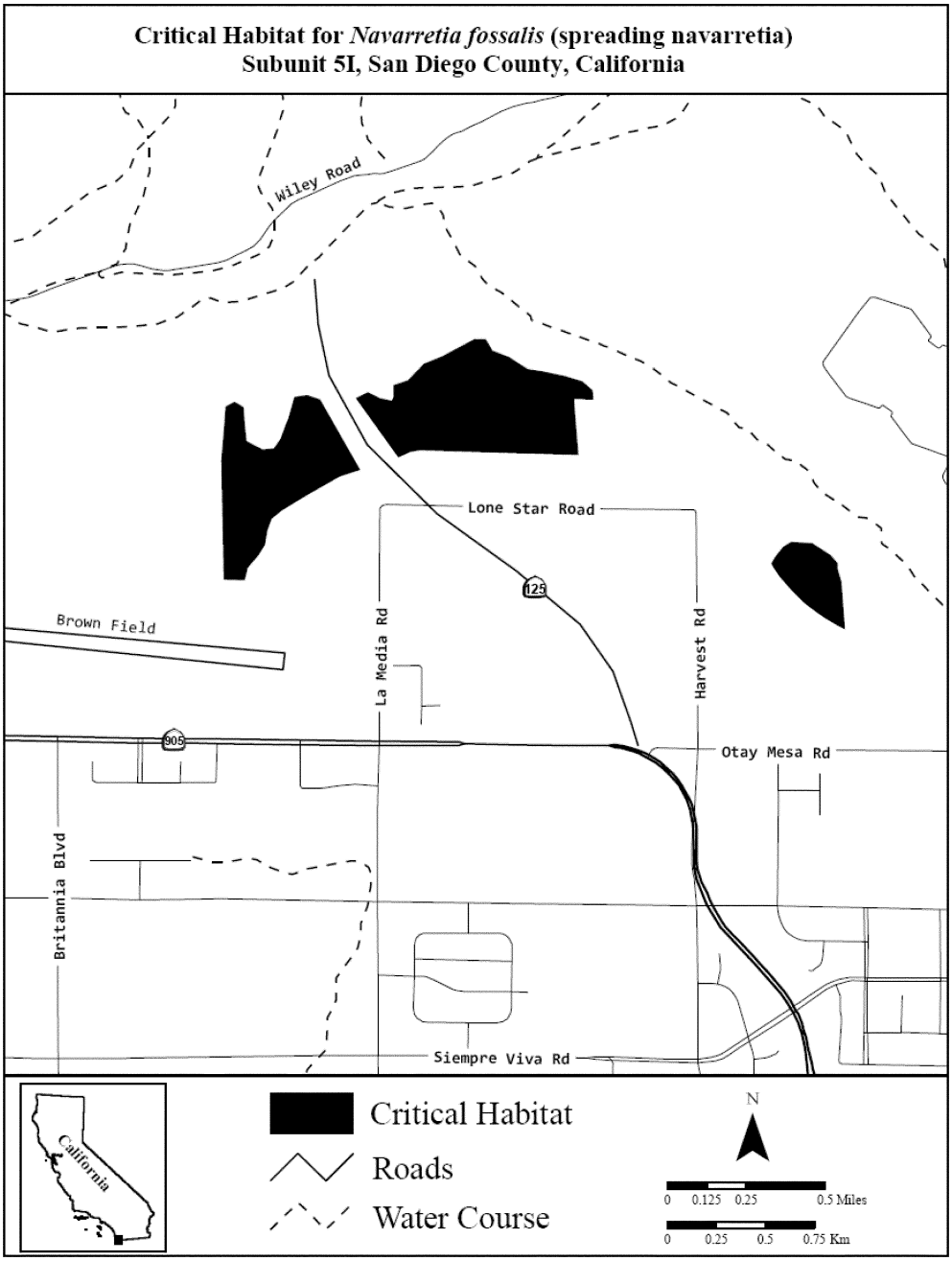
(22) Unit 5: San Diego: Southern Coastal Mesa Management Area, San Diego County, CA. Subunit 5I: Eastern Otay Mesa Vernal Pool Complexes.

(i) From USGS 1:24,000 quadrangle Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 505882, 3604195; 505900, 3603953; 505859, 3603974; 505832, 3603989; 505798, 3604009; 505753, 3604040; 505721, 3604065; 505690, 3604091; 505662, 3604118; 505633, 3604147; 505608, 3604176; 505569, 3604222; 505539, 3604260; 505527, 3604287; 505547, 3604326; 505587, 3604372; 505626, 3604399; 505733, 3604393; 505828, 3604330; 505863, 3604289; 505865, 3604259; 505882, 3604195; thence returning to 505882, 3604195.

(ii) From USGS 1:24,000 quadrangle Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N): 503223, 3605127; 503429, 3604767; 503325, 3604734; 503153, 3604635; 503028, 3604559; 502978, 3604516; 502955, 3604458; 502942, 3604387; 502909, 3604331; 502856, 3604268; 502838, 3604202; 502733, 3604206; 502719, 3604815; 502735, 3605001; 502742, 3605091; 502788, 3605114; 502833, 3605086; 502840, 3605001; 502847, 3604914; 502930, 3604871; 502988, 3604876; 503021, 3604924; 503050, 3605001; 503061, 3605030; 503092, 3605139; 503130, 3605145; 503160, 3605149; 503223, 3605127; thence returning to 503223, 3605127.

(iii) From USGS 1:24,000 quadrangle Otay Mesa. Land bounded by the following UTM NAD83 coordinates (E, N):504614, 3605172; 504617, 3605127; 504583, 3605128; 504550, 3605129; 504519, 3605130; 504519, 3605122; 504540, 3604842; 503733, 3604867; 503681, 3604857; 503658, 3604846; 503624, 3604830; 503406, 3605134; 503467, 3605162; 503530, 3605134; 503588, 3605119; 503598, 3605139; 503598, 3605200; 503672, 3605223; 503753, 3605309; 503847, 3605347; 503912, 3605382; 503925, 3605389; 504011, 3605433; 504067, 3605433; 504096, 3605387; 504102, 3605377; 504186, 3605344; 504240, 3605309; 504283, 3605282; 504358, 3605268; 504475, 3605246; 504552, 3605221; 504561, 3605218; 504587, 3605196; 504614, 3605172; thence returning to 504614, 3605172.

(iv) *Note*: Map of Unit 5, Subunit 5I (Eastern Otay Mesa Vernal Pool Complexes) follows:



BILLING CODE 4310–55–C

(23) Unit 6: Riverside: Riverside Management Area, Riverside County, CA. Subunit 6A: San Jacinto River.

(i) From USGS 1:24,000 quadrangles Perris and Lakeview. Land bounded by the following UTM NAD83 coordinates (E, N): 480115, 3736015; 480123, 3736089; 480006, 3736246; 479961, 3736644; 479978, 3736737; 480068, 3736890; 481015, 3736904; 481258, 3737111; 481423, 3736990; 481474, 3736952; 481500, 3736933; 481500, 3736933; 481545, 3736899; 481546, 3736899; 481550, 3736896; 481717, 3736773; 481889, 3736646; 481884, 3736589; 481807, 3736439; 481388, 3735908; 481199, 3735637; 481101, 3735567; 480929, 3735516; 480866, 3735513; 480742, 3735505; 480700, 3735490; 480699, 3735490; 480658, 3735471; 480615, 3735434; 480604, 3735421; 480565, 3735397; 480520, 3735296; 480463, 3735138; 480410, 3735025; 480359, 3734946; 480274, 3734884; 480175, 3734856; 480102, 3734839; 480006, 3734830; 479843, 3734847; 479783, 3734918; 479733, 3735028; 479744, 3735177; 479783, 3735259; 479899, 3735327; 479936, 3735397; 479969, 3735510; 480020, 3735584; 480071, 3735637; 480106, 3735671; 480115, 3736015; thence returning to 480115, 3736015.

(ii) From USGS 1:24,000 quadrangles Perris and Lakeview. Land bounded by the following UTM NAD83 coordinates (E, N):482086, 3737103; 481896, 3737158; 481736, 3737152; 481607, 3737005; 481565, 3737040; 481565, 3737040; 481499, 3737095; 481495, 3737098; 481495, 3737098; 481460, 3737128; 481498, 3737171; 481607, 3737294; 481659, 3737308; 481659, 3737308; 481675, 3737312; 481806, 3737364; 481806, 3737365; 481828, 3737373; 481884, 3737410; 482049, 3737423; 482228, 3737521; 482293, 3737565; 482301, 3737570; 482305, 3737714; 482307, 3737840; 482332, 3738252; 482381, 3738399; 482400, 3738519; 482406, 3738559; 482498, 3738780; 482590, 3738989; 482670, 3739143; 482799, 3739259; 483002, 3739302; 483057, 3739329; 483058, 3739329; 483102, 3739351; 483154, 3739376; 483180, 3739388; 483352, 3739505; 483481, 3739579; 483555, 3739659; 483622, 3739714; 483733, 3739714; 483849, 3739726; 483914, 3739777; 483935, 3739794; 483942, 3739923; 483946, 3739994; 483948, 3740021; 483997, 3740083; 484071, 3740101; 484109, 3740101; 484175, 3740101; 484286, 3740101; 484409, 3740101; 484491, 3740101; 484556, 3740101; 484562, 3740101; 484660, 3740101; 484724, 3740101; 484808, 3740101; 484740, 3740015; 484724, 3740003; 484593, 3739911; 484558, 3739876; 484507, 3739825; 484310, 3739634; 484095, 3739438; 484078, 3739426; 483978, 3739358; 483961, 3739335; 483914, 3739275; 483904, 3739263; 483910, 3738133; 483780, 3737932; 483550, 3737726; 483330, 3737413; 483310, 3737372; 483104, 3737308; 483107, 3736913; 482312, 3736913; 482230, 3736937; 482203, 3736962; 482172, 3737005; 482086, 3737103; thence returning to 482086, 3737103.

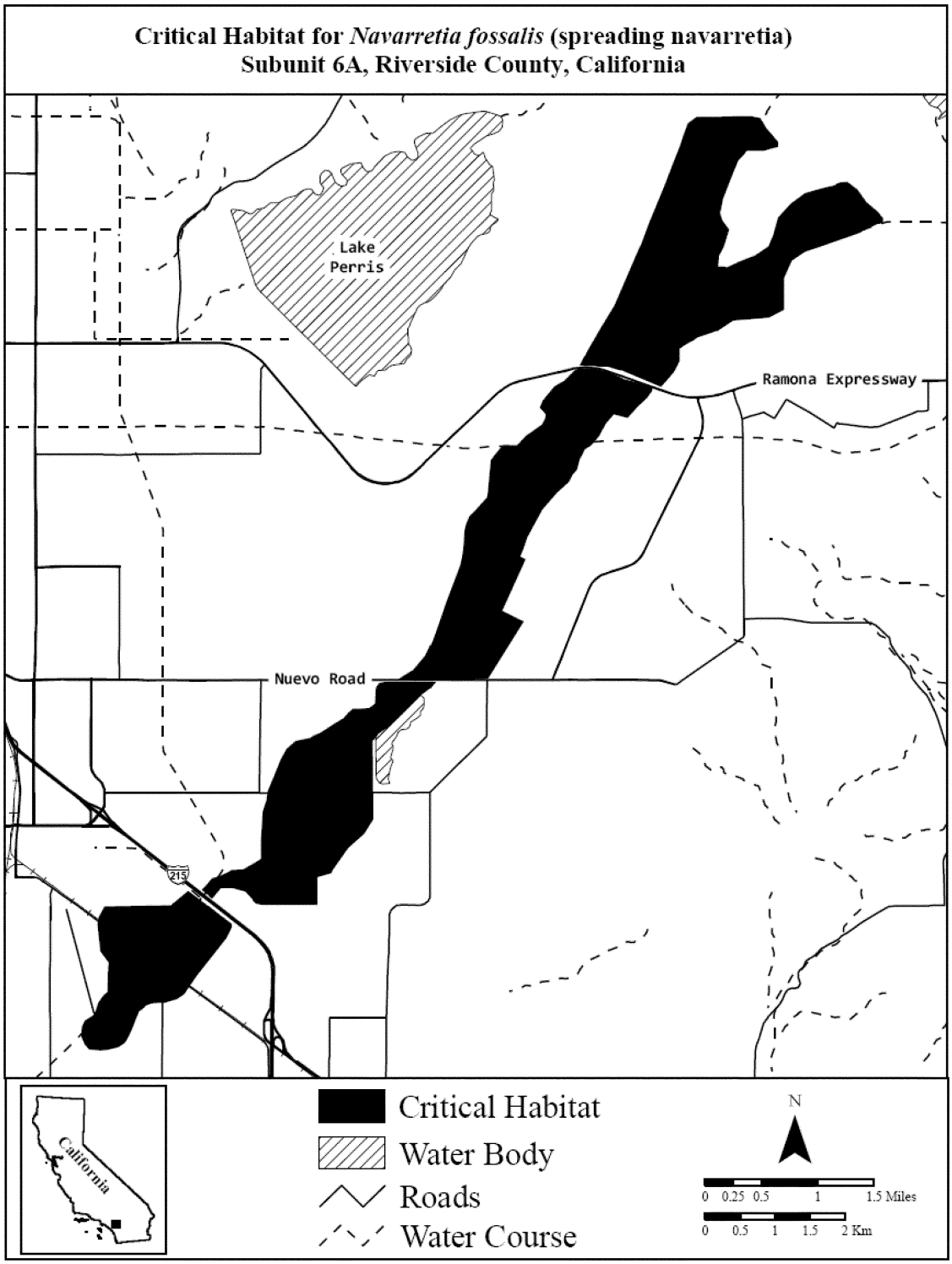
(iii) From USGS 1:24,000 quadrangles Perris and Lakeview. Land bounded by the following UTM NAD83 coordinates (E, N): 485275, 3740138; 484724, 3740131; 484574, 3740129; 484505, 3740129; 484256, 3740126; 484305, 3740158; 484305, 3740158; 484397, 3740217; 484483, 3740273; 484649, 3740476; 484723, 3740618; 484725, 3740623; 484725, 3740623; 484760, 3740691; 484853, 3740957; 484956, 3741250; 485150, 3741749; 485159, 3741772; 485184, 3741895; 485202, 3742006; 485218, 3742268; 485221, 3742307; 485244, 3742361; 485288, 3742466; 485368, 3742554; 485531, 3742733; 485534, 3742737; 485537, 3742748; 485537, 3742748; 485552, 3742804; 485575, 3743092; 485589, 3743271; 485662, 3743360; 485679, 3743380; 485711, 3743419; 485761, 3743480; 485917, 3743485; 485964, 3743486; 486099, 3743615; 486204, 3743695; 486326, 3743781; 486336, 3743800; 486369, 3743867; 486376, 3743928; 486369, 3743936; 486336, 3743974; 486296, 3744021; 486336, 3744125; 486339, 3744131; 486366, 3744163; 486366, 3744163; 486492, 3744315; 486519, 3744332; 486551, 3744352; 486640, 3744408; 486787, 3744549; 486855, 3744586; 487051, 3744586; 487135, 3744567; 487242, 3744543; 487425, 3744461; 487477, 3744437; 487488, 3744432; 487690, 3744377; 487905, 3744309; 487899, 3744260; 487824, 3744168; 487824, 3744168; 487795, 3744131; 487690, 3744039; 487631, 3743972; 487543, 3743873; 487346, 3743928; 487236, 3743799; 487150, 3743627; 487133, 3743609; 487027, 3743486; 486935, 3743418; 486907, 3743363; 486867, 3743283; 486818, 3743136; 486763, 3743062; 486707, 3742964; 486535, 3742804; 486366, 3742612; 486356, 3742601; 486351, 3742595; 486348, 3742590; 486334, 3742565; 486330, 3742557; 486111, 3742165; 486057, 3742013; 486019, 3741907; 486012, 3741890; 486090, 3741855; 485750, 3741117; 486062, 3740960; 485546, 3740143; 485276, 3740138; 485275, 3740138; thence returning to 485275, 3740138.

(iv) From USGS 1:24,000 quadrangles Perris and Lakeview. Land bounded by the following UTM NAD83 coordinates (E, N): 488922, 3746032; 488976, 3746028; 489134, 3746103; 489376, 3746196; 489562, 3746326; 489603, 3746429; 489618, 3746466; 489662, 3746610; 489663, 3746613; 489672, 3746642; 489684, 3746680; 489690, 3746700; 489701, 3746735; 489768, 3746809; 489887, 3746940; 490083, 3747089; 490231, 3747126; 490425, 3747178; 490511, 3747200; 490519, 3747205; 490546, 3747218; 490585, 3747238; 490687, 3747247; 490836, 3747135; 490966, 3746959; 491124, 3746819; 491199, 3746726; 491199, 3746680; 491199, 3746678; 491199, 3746661; 491152, 3746652; 491125, 3746646; 491106, 3746642; 491056, 3746617; 491047, 3746613; 491045, 3746612; 490864, 3746522; 490864, 3746522; 490827, 3746503; 490652, 3746443; 490404, 3746359; 490390, 3746354; 490083, 3746252; 489983, 3746182; 489983, 3746182; 489979, 3746179; 489897, 3746121; 489785, 3745870; 489785, 3745793; 489785, 3745582; 489785, 3745424; 489601, 3745328; 489571, 3745312; 489292, 3745284; 489059, 3745266; 488827, 3745117; 488810, 3745111; 488810, 3745111; 488806, 3745110; 488787, 3745103; 488557, 3745024; 488514, 3745000; 488514, 3745000; 488493, 3744988; 488464, 3744972; 488408, 3744940; 488338, 3744897; 488306, 3744877; 488290, 3744867; 488287, 3744866; 488287, 3744689; 488272, 3744656; 488222, 3744549; 488212, 3744537; 488205, 3744528; 488205, 3744528; 488101, 3744401; 488027, 3744317; 487969, 3744341; 487537, 3744523; 487537, 3744523; 487500, 3744539; 487497, 3744540; 487476, 3744546; 487427, 3744559; 487255, 3744605; 487148, 3744610; 487135, 3744611; 487125, 3744611; 487059, 3744615; 487056, 3744615; 487023, 3744616; 486974, 3744619; 486934, 3744621; 486934, 3744621; 486864, 3744624; 486911, 3744726; 486945, 3744784; 486975, 3744834; 487054, 3744967; 487060, 3744979; 487067, 3744989; 487148, 3745127; 487357, 3745480; 487712, 3746290; 487720, 3746307; 487739, 3746356; 487857, 3746655; 488073, 3747200; 488202, 3747526; 488288, 3747745; 488297, 3747768; 488361, 3747950; 488408, 3748084; 488539, 3748177; 488574, 3748178; 488582, 3748178; 488595, 3748178; 488800, 3748180; 488805, 3748180; 489137, 3748184; 489217, 3748185; 489329, 3748186; 489346, 3748182; 489436, 3748160; 489441, 3748159; 489498, 3748067; 489520, 3748032; 489520, 3748032; 489534, 3748010; 489605, 3747930; 489701, 3747824; 489701, 3747749; 489690,

3747746; 489608, 3747724; 489608, 3747724; 489605, 3747723; 489497, 3747693; 489391, 3747693; 489293, 3747693; 489279, 3747693; 489255, 3747693; 489240, 3747677; 489217, 3747653; 489134, 3747563; 489133, 3747561; 489067, 3747400; 489032, 3747312; 488911, 3747005; 488873, 3746800; 488881, 3746769; 488887, 3746746; 488901, 3746689; 488994, 3746568; 488966, 3746456; 488920, 3746317; 488855, 3746187; 488845, 3746066; 488845, 3746038; 488922, 3746032; thence returning to 488922, 3746032.

(v) *Note*: Map of Unit 6, Subunit 6A (San Jacinto River) follows:

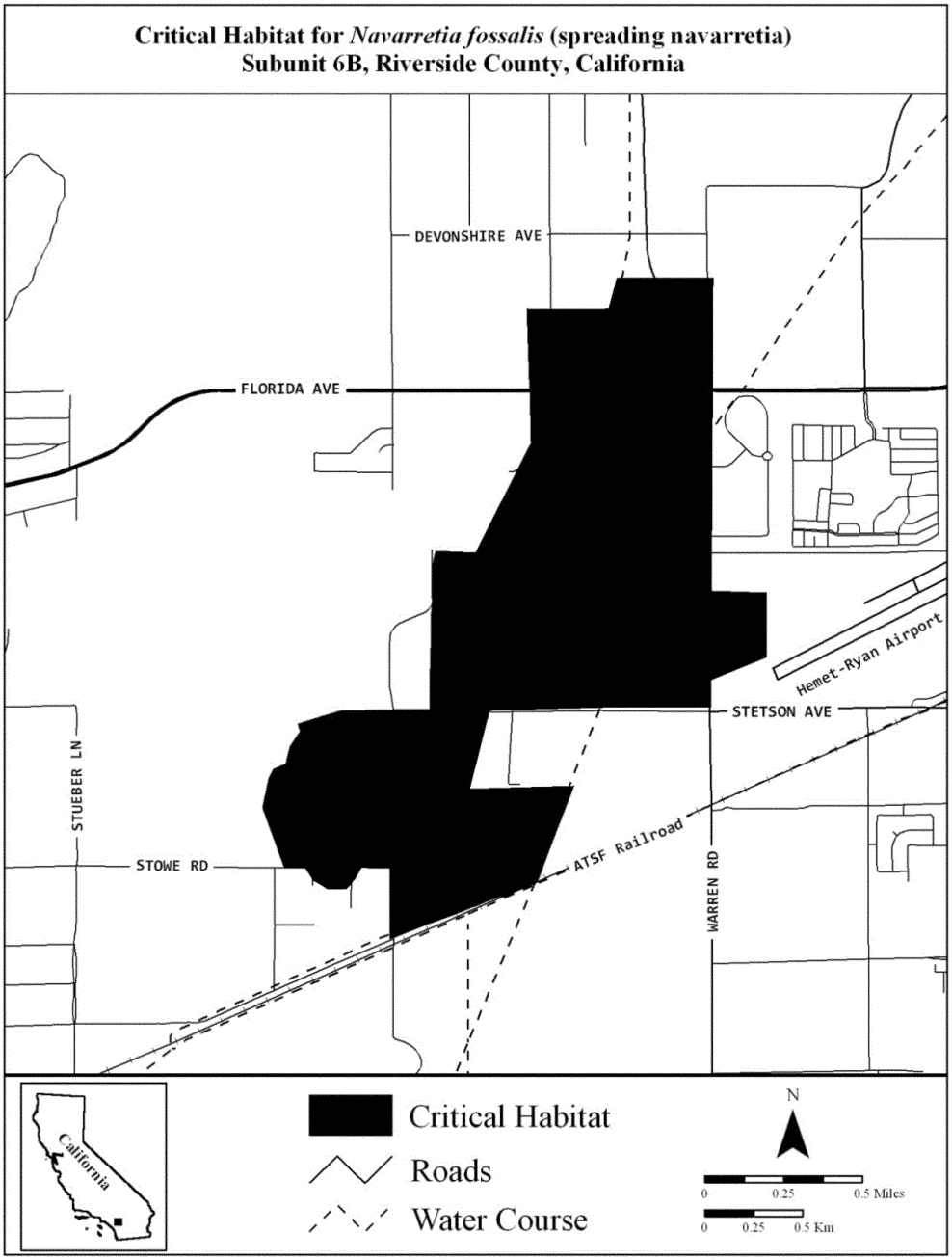
BILLING CODE 4310–55–S



(24) Unit 6: Riverside: Riverside Management Area, Riverside County, CA. Subunit 6B: Salt Creek Seasonally Flooded Alkali Plain.

(i) From USGS 1:24,000 quadrangles Lakeview and Winchester. Land bounded by the following UTM NAD83 coordinates (E, N): 496999, 3734333; 496995, 3733632; 496993, 3733374; 496993, 3733353; 496992, 3733079; 496991, 3733046; 496991, 3732939; 496990, 3732731; 497270, 3732723; 497270, 3732391; 496987, 3732276; 496986, 3732133; 496979, 3732133; 496441, 3732133; 495871, 3732118; 495855, 3732117; 495791, 3731864; 495754, 3731720; 496288, 3731734; 496176, 3731442; 496130, 3731321; 496119, 3731293; 496110, 3731269; 496105, 3731257; 496098, 3731238; 495840, 3731139; 495783, 3731117; 495764, 3731110; 495673, 3731075; 495539, 3731023; 495370, 3730958; 495370, 3730958; 495344, 3730948; 495344, 3731276; 495344, 3731308; 495344, 3731312; 495203, 3731319; 495197, 3731308; 495182, 3731281; 495169, 3731258; 495144, 3731229; 495122, 3731204; 495028, 3731204; 494990, 3731228; 494954, 3731251; 494929, 3731288; 494917, 3731307; 494913, 3731312; 494806, 3731312; 494766, 3731420; 494693, 3731621; 494724, 3731768; 494749, 3731819; 494811, 3731848; 494835, 3731935; 494886, 3732013; 494875, 3732052; 494962, 3732078; 495080, 3732115; 495080, 3732115; 495095, 3732120; 495368, 3732124; 495546, 3732126; 495551, 3732348; 495558, 3732640; 495560, 3732698; 495566, 3732880; 495578, 3732932; 495579, 3732936; 495783, 3732925; 496065, 3733488; 496058, 3733755; 496057, 3733807; 496043, 3734174; 496173, 3734170; 496461, 3734174; 496505, 3734333; thence returning to 496999, 3734333.

(ii) *Note*: Map of Unit 6, Subunit 6B (Salt Creek Seasonally Flooded Alkali Plain) follows:

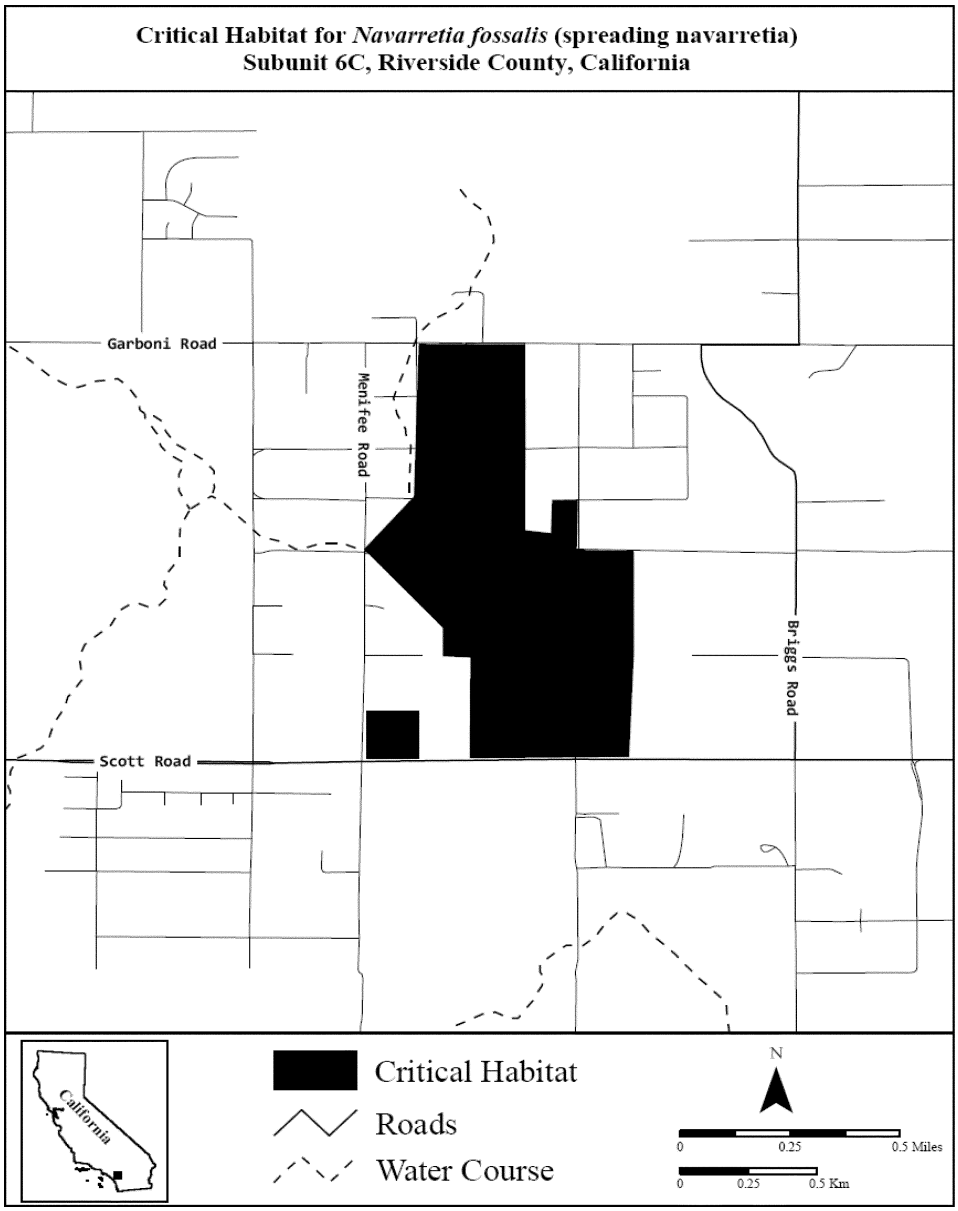


(25) Unit 6: Riverside: Riverside Management Area, Riverside County, CA. Subunit 6C: Wickerd and Scott Road Pools.

(i) From USGS 1:24,000 quadrangle Romoland. Land bounded by the following UTM NAD83 coordinates (E, N): 485930, 3722429; 485737, 3722429; 485737, 3722611; 485930, 3722611; 485930, 3722429; thence returning to 485930, 3722429.

(ii) From USGS 1:24,000 quadrangle Romoland. Land bounded by the following UTM NAD83 coordinates (E, N): 485922, 3723029; 485730, 3723232; 485911, 3723435; 485930, 3724021; 486317, 3724020; 486317, 3723305; 486412, 3723293; 486417, 3723421; 486512, 3723424; 486506, 3723229; 486714, 3723225; 486716, 3723220; 486716, 3723210; 486716, 3723200; 486716, 3723196; 486716, 3723094; 486716, 3723072; 486716, 3723031; 486716, 3722986; 486716, 3722964; 486716, 3722954; 486716, 3722915; 486716, 3722899; 486716, 3722885; 486716, 3722830; 486699, 3722435; 486116, 3722429; 486118, 3722817; 486016, 3722821; 486016, 3722931; 485922, 3723029; thence returning to 485922, 3723029.

(iii) *Note*: Map of Unit 6, Subunit 6C (Wickerd and Scott Road Pools) follows:



* * * * *

Dated: September 23, 2010

Eileen Sobeck,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 2010–24763 Filed 10–6–10; 8:45 am]

BILLING CODE 4310–55–C