

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

RIN 1018-AT89

**Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover****AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), are designating critical habitat for the Pacific coast population of the western snowy plover (*Charadrius alexandrinus nivosus*) pursuant to the Endangered Species Act of 1973, as amended (Act). In total, approximately 12,145 acres (ac) (4,921 hectares (ha)) fall within the boundaries of the critical habitat designation. The critical habitat is located within 3 states, and a total of 20 counties. The county breakdown by State is as follows: California—San Diego, Orange, Los Angeles, Ventura, Santa Barbara, San Luis Obispo, Monterey, Santa Cruz, San Mateo, Marin, Mendocino, Humboldt, Del Norte; Oregon—Curry, Coos, Douglas, Lane, Tillamook; and Washington—Pacific, Grays Harbor.

**DATES:** This rule becomes effective on October 31, 2005.

**ADDRESSES:** Comments and materials received, as well as supporting documentation used in the preparation of this final rule, are available for public inspection, by appointment, during normal business hours at the Arcata Fish and Wildlife Office, 1655 Heindon Road, Arcata, CA 95521 (telephone 707/822-7201). The final rule, economic analysis, and supporting Geographic Information System (GIS) reports will also be available via the Internet at <http://www.fws.gov/pacific/sacramento/default.htm>.

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**SUPPLEMENTARY INFORMATION:****Designation of Critical Habitat Provides Little Additional Protection to Species**

In 30 years of implementing the Act, the Service has found that the designation of statutory critical habitat provides little additional protection to most listed species, while consuming

significant amounts of available conservation resources. The Service's present system for designating critical habitat has evolved since its original statutory prescription into a process that provides little real conservation benefit, is driven by litigation and the courts rather than biology, limits our ability to fully evaluate the science involved, consumes enormous agency resources, and imposes huge social and economic costs. The Service believes that additional agency discretion would allow our focus to return to those actions that provide the greatest benefit to the species most in need of protection.

*Role of Critical Habitat in Actual Practice of Administering and Implementing the Act*

While attention to and protection of habitat is paramount to successful conservation actions, we have consistently found that, in most circumstances, the designation of critical habitat is of little additional value for most listed species, yet it consumes large amounts of conservation resources. Sidle (1987) stated, "Because the Act can protect species with and without critical habitat designation, critical habitat designation may be redundant to the other consultation requirements of section 7." Currently, only 473 species or 38 percent of the 1,253 listed species in the U.S. under the jurisdiction of the Service have designated critical habitat.

We address the habitat needs of all 1,253 listed species through conservation mechanisms such as listing, section 7 consultations, the Section 4 recovery planning process, the Section 9 protective prohibitions of unauthorized take, Section 6 funding to the States, and the Section 10 incidental take permit process. The Service believes that it is these measures that may make the difference between extinction and survival for many species.

We note, however that two courts found our definition of adverse modification to be invalid (March 15, 2001, decision of the United States Court of Appeals for the Fifth Circuit, *Sierra Club v. U.S. Fish and Wildlife Service et al.*, F.3d 434 and the August 6, 2004, Ninth Circuit judicial opinion, *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*). In response to these decisions, we are reviewing the regulatory definition of adverse modification in relation to the conservation of the species.

*Procedural and Resource Difficulties in Designating Critical Habitat*

We have been inundated with lawsuits for our failure to designate critical habitat, and we face a growing number of lawsuits challenging critical habitat determinations once they are made. These lawsuits have subjected the Service to an ever-increasing series of court orders and court-approved settlement agreements, compliance with which now consumes nearly the entire listing program budget. This leaves the Service with little ability to prioritize its activities to direct scarce listing resources to the listing program actions with the most biologically urgent species conservation needs.

The consequence of the critical habitat litigation activity is that limited listing funds are used to defend active lawsuits, to respond to Notices of Intent (NOIs) to sue relative to critical habitat, and to comply with the growing number of adverse court orders. As a result of this consequence, listing petition responses, the Service's own proposals to list critically imperiled species, and final listing determinations on existing proposals are all significantly delayed.

The accelerated schedules of court-ordered designations have left the Service with almost no ability to provide for adequate public participation or to ensure a defect-free rulemaking process before making decisions on listing and critical habitat proposals due to the risks associated with noncompliance with judicially imposed deadlines. This situation in turn fosters a second round of litigation in which those who fear adverse impacts from critical habitat designations challenge those designations. The cycle of litigation appears endless, is very expensive, and in the final analysis provides relatively little additional protection to listed species.

The costs resulting from the designation include legal costs, the costs of preparation and publication of the designation, the analysis of the economic effects and the costs of requesting and responding to public comments, and, in some cases, the costs of compliance with National Environmental Policy Act. None of these costs result in any benefit to the species that is not already afforded by the protections of the Act enumerated earlier, and these associated costs directly reduce the scarce funds available for direct and tangible conservation actions.



## Background

Background information on the Pacific coast population of the western snowy plover (Pacific Coast WSP) can be found in our final rule listing of the Pacific Coast WSP, published in the **Federal Register** (FR) on March 5, 1993 (58 FR 12864), and our recent proposal of critical habitat for this population, published on December 17, 2004 (69 FR 75608). Additional background information is also available in our previous final designation of critical habitat for the Pacific Coast WSP, published on December 7, 1999 (64 FR 68508).

## Previous Federal Actions

For a discussion of previous Federal actions regarding the Pacific Coast WSP, please see our final rule listing the population, published on March 5, 1993 (58 FR 12864), our recent proposal of critical habitat for this population, published on December 17, 2004 (69 FR 75608), and the December 7, 1999, final rule to designate critical habitat for the Pacific coast population of the western snowy plover (64 FR 68508). The December 7, 1999, was remanded and partially vacated by the United States District Court for the District of Oregon on July 2, 2003, for the Service to reconsider the designation and conduct a new analysis of economic impacts (*Coos County Board of County Commissioners et. al. v. Department of the Interior et al.*, CV 02-6128, M. Hogan). The court set a deadline of December 1, 2004, for submittal of a new proposed critical habitat designation to the Office of the Federal Register; the proposed rule was published on December 17, 2004 (69 FR 75608). On August 16, 2005, we published in the FR (70 FR 48094) a notice of availability for the draft economic analysis associated with the proposed rule and we reopened the comment period on the proposed rule for 30 days. The court-established deadline for submittal of the final designation is September 20, 2005. This final rule complies with the September 20, 2005, deadline.

In August 2002, we received a petition to delist the Pacific Coast WSP from the Surf Ocean Beach Commission of Lompoc, California. The City of Morro Bay submitted largely the same petition dated May 30, 2003. On March 22, 2004, we published a notice that the petition presented substantial information to indicate that delisting may be warranted (69 FR 13326). We are currently conducting both a 12-month and a 5-year status review of the population under sections 4(b)(3)(A),

4(b)(3)(B) and 4(c)(2) of the Act, in order to issue the finding required by section 4(b)(3)(B) in response to the petitions.

## Summary of Comments and Recommendations

We requested written comments from the public on the proposed designation of critical habitat for the Pacific Coast WSP in the proposed rule published on December 17, 2004 (69 FR 75608). We also contacted the appropriate Federal, State, and local agencies; Tribes; scientific organizations; and other interested parties and invited them to comment on the proposed rule. We received two requests for a public hearing or "workshop" prior to the published deadline. Public meetings were held in Tomales, California, and Crescent City, California, on February 14, 2005, and March 8, 2005, respectively. The initial comment period closed on February 15, 2005. A second comment period for the draft Economic Analysis (DEA) was open from August 16, 2005 to September 15, 2005. All comments and new information received during the two comment periods have been incorporated into this final rule as appropriate.

A total of 1,055 commenters responded during the two comment periods, including 8 Federal agencies, 4 State agencies, 17 local agencies, 21 organizations, and 1005 individuals. Form letters attributed the most comments on the proposed Lake Earl unit (CA 1), and comment cards and a petition accounted for most of the comments regarding the proposal of Dillon Beach (CA 7). Thirty-four commenters submitted two separate sets of comments. During the comment period from December 17, 2004, to February 15, 2005, we received 36 comments directly addressing the proposed critical habitat designation and DEA: 1 from a State agency, 6 from local agencies, and 29 from organizations and individuals.

Most comments did not support designation of critical habitat. The vast majority of comments objected to the designation of Dillon Beach (CA 7) and Lake Earl (CA 1). Five hundred ninety petition signatures and form letters objected to designation of Dillon Beach (CA 7) as critical habitat, and 117 form letters opposed designation of the Lake Earl unit (CA 1). The petition and form letters associated with these 2 units skewed the overall support for designation; representing approximately 67 percent of the comments received. We reviewed all comments for substantive information and new data regarding the listed population and its

critical habitat. Comments containing substantive information have been grouped together by issue and are addressed in the following summary. All comments and information have been incorporated into the final rule as appropriate.

## Peer Review

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited independent opinions from at least three knowledgeable individuals who have expertise with the species, the geographic region where the species occurs, and/or familiarity with the principles of conservation biology. Of the five individuals contacted, three responded. The peer reviewers generally supported the proposal and provided us with comments which are included in the summary below and incorporated into the final rule, as appropriate. Unless otherwise noted, the peer review commented on our proposed rule published December 17, 2004. Subsequent changes to our proposal reflected in the final rule resulting from comments received during the second comment period did not receive peer review comment.

We reviewed all comments received from the peer reviewers and the public for substantive issues and new information regarding critical habitat for the western snowy plover, and addressed them in the following summary.

## Peer Reviewer Comments

1. *Comment:* A peer reviewer who conducts shorebird research in northern California through an academic institution agreed with the general biology presented in the proposed rule; however, the reviewer felt that describing the Pacific Coast WSP's social system as territorial was misleading. Although true for breeding areas where the densities of nesting plovers is high, the reviewer stated that plovers in many parts of the Pacific Coast WSP's range do not defend a well-defined space (*i.e.* territory). This point may be important when estimating the number of individual breeders that can be supported by an area of particular size.

*Our Response:* We agree with the peer reviewer regarding the territorial nature of the Pacific Coast WSP, and his point relative to estimating the number of breeders capable of using a specified area. Our estimates provided in the unit descriptions were based on the best historical information we had from surveys conducted in the late 1970s. It is unknown if those estimates were



based on an already declining population, or a population that was at carrying capacity. In addition, changing conditions in the dynamic habitats preferred by the Pacific Coast WSP likely affects an area's capacity to support breeding plovers.

2. *Comment:* One peer reviewer is investigating the importance of social attraction in relation to the settlement of inexperienced Pacific Coast WSPs (*i.e.* first-time breeders). Preliminary data from Coal Oil Point suggest that social factors play a role in attracting plovers to nest in an area. If true, the management of wintering flocks may be important relative to determining where plovers nest (*e.g.* Coal Oil Point Preserve at U.C. Santa Barbara, California).

*Our Response:* We agree with the commenter's preliminary assessment of the Coal Oil Point Preserve study. Our designation of critical habitat recognizes the importance of both wintering and breeding areas.

3. *Comment:* Two of the peer reviewers commented on our proposal to designate critical habitat only in areas currently occupied, or occupied at the time of listing. Specifically, the 1993 listing was based, in part, on the absence of breeding plovers at formerly occupied sites, and the former critical habitat designation in 1999 made use of former and current site (1998) occupancy. Birds absent from formerly occupied sites may be an outcome of low population size, not necessarily because habitat has become unsuitable at a site. The proposed units place a higher emphasis on occupied sites than unoccupied. As the Pacific Coast WSP recovers, it will presumably need areas in which to expand; some of which are currently suitable, but unoccupied.

*Our Response:* Although we acknowledge that unoccupied areas may be important for the conservation of many species, the Service determined that no unoccupied units were essential for conservation of this DPS.

4. *Comment:* A peer reviewer suggested that the Eel River gravel bars below (*i.e.* downstream) of Fernbridge be included as designated critical habitat due to their importance as breeding habitat both locally, and in northern California and southern Oregon region.

*Our Response:* We acknowledge the importance of the lower gravel bars on the Eel River to plover conservation in northern California; however, our data show that the pre-listing discovery of plovers on the Eel River system were above Fernbridge, and subsequent data from the mid to late 1990s indicates that most plover use was also between Fernbridge and the Van Duzen River.

We also acknowledge that plover surveys outside of the area proposed for critical habitat (CA 4D) were inadequate during that time period. Without supporting data, we did not propose the lower portions of the Eel River as critical habitat.

#### *Comments From States*

Section 4(i) of the Act states, if a State agency files comments disagreeing with a proposed regulation, and the Service issues a final regulation in conflict with the State's comments, or fails to adopt a regulation petitioned by a State agency, the Secretary shall submit to the State agency a written justification for her failure to adopt regulation consistent with the agency's comments or petition. Comments received from States regarding the proposal to designate critical habitat for the western snowy plover are addressed below.

5. *State Comment:* The California Department of Boating and Waterways commented that designation of critical habitat at Dillon Beach would restrict and prohibit boat launching along the beach and at the Lawson's Landing facility, resulting in a significant fiscal impact.

*Our Response:* Critical habitat has been designated at the proposed location since 1999 (64 FR 68508). The draft economic analysis for the proposed critical habitat rule (70 FR 48094) differs from the State's assessment, and concludes there is no significant economic impact at the proposed Dillon Beach unit. However, this unit was excluded from critical habitat designation under section 4(b)(2) of the Act (*see* section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

6. *State Comment:* The Oregon Department of Fish and Wildlife (ODFW) supports the proposed designations in occupied units with the exception of unit boundaries for OR 8A and OR 10A. The State would like those unit boundaries to more closely coincide with the State's draft HCP. Additionally, ODFW proposes designation of Bayocean and Clatsop River Spit as critical habitat.

*Our Response:* Where possible, unit boundaries have been adjusted to conform more closely to the management boundaries presented in the State's draft HCP. Bayocean Spit (OR 3) is designated as critical habitat. We believe that ODFW was referring to the Columbia River Spit regarding their comment on the Clatsop River Spit because of the underlying federal ownership at that location. We are not designating the Columbia River Spit

(subunit OR 1A in the proposed rule) because it was determined not to be essential to the conservation of the species.

7. *State Comment:* The Oregon Parks and Recreation Department also generally supported designation of the proposed units; however, believes that only the occupied units should be designated to conform to the State's HCP effort.

*Our Response:* We have made adjustments to our occupied proposed units to have them more closely aligned with the State's HCP effort.

#### *Comments Related to Previous Federal Actions, the Act, and Implementing Regulations*

8. *Comment:* Several commenters noted that the Service has pending action on the 12-month finding for a petition to delist the Pacific Coast WSP as a threatened species.

*Our Response:* We are currently in the process of completing our status review for this species. The court's deadline for completing this designation does not permit us to take into account whatever actions, if any, might ultimately result from our status review. If we conclude that the species remains in need of the protections of the Act, the critical habitat designated here will remain in place. If we determine that the species is not in need of the protection of the Act, and ultimately remove it from the list, then this critical habitat designation would be vacated.

9. *Comment:* Several commenters indicated that the Service was violating the National Environmental Policy Act (NEPA) by not preparing an environmental assessment or environmental impact statement on the proposed designation of critical habitat for the Pacific Coast WSP.

*Our Response:* It is our position that we do not need to comply with NEPA in connection with designating critical habitat under the Act outside the jurisdictional areas of the Tenth Circuit Court. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This assertion was upheld by the Ninth Circuit Court (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. Ore. 1995), cert. denied 116 S. Ct. 698 (1996)).

10. *Comment:* A commenter stated that the Service's contention that several areas could be excluded because "existing management is sufficient to conserve the species" is incorrect. They state that areas where management activities are being implemented to conserve the plover by definition "require special management



considerations or protection.”

Otherwise, management activities would not have been implemented (*e.g.*, *Center for Biological Diversity v. Norton*, 240 F. Supp 2d 1090 (D. Az. 2003)). They also state that excluding areas under section 4(b)(2) based on the Service’s conclusion that the benefits of designating any area as critical habitat is insignificant, is also incorrect. They maintain that critical habitat designation can provide significant protection to a species’ habitat, particularly as that habitat pertains to recovery (as opposed to mere survival) (*see Natural Resources Defense Council v. Department of Interior*, 113 F. 3d 1121, 1125–1127 (9th Cir. 1997); Conservation Council for *Hawaii v. Babbitt*, 2 F. Supp. 2d 1280, 1285–1286 (D. Ha. 1998)).

**Our Response:** Rationale for any exemptions and exclusions of particular areas have been included in this document. We believe that the commenter has oversimplified the process by which lands are determined to be included, exempted, or excluded from a critical habitat determination. It is incorrect to state that the Service views the all benefits of designating critical habitat in any particular area as insignificant. Our analyses under section 4(b)(2) of the Act weigh the benefits of exclusion against the benefits of inclusion and determine within any particular area whether it is appropriate to exclude.

11. *Comment:* A commenter disagreed with the statement in the proposed rule, that “In 30 years of implementing the Act the Service has found that the designation of statutory critical habitat provides little additional protection to most listed species \* \* \*” The commenter stated that the proposal includes absolutely no evidence to bolster these assertions, which are inconsistent with recent, controlling judicial decisions, congressional intent, and sound science. They asserted that the fact that the Service’s critical habitat decisions are driven by lawsuits and court-ordered deadlines is irrelevant to the Service’s mandatory obligation to designate critical habitat for the plover and other listed species. They also assert that the Service’s budget requests typically fall short of the amount of money necessary to address the backlog of listing and critical habitat, and that limited resources should not be used as an excuse for not designating critical habitat.

**Our Response:** Comment noted. As discussed in the sections “Designation of Critical Habitat Provides Little Additional Protection to Species,” “Role of Critical Habitat in Actual Practice of

Administering and Implementing the Act,” and “Procedural and Resource Difficulties in Designating Critical Habitat” and other sections of this and other critical habitat designations, we believe that, in most cases, conservation mechanisms provided through section 7 consultations, the section 4 recovery planning process, the section 9 protective prohibitions of unauthorized take, section 6 funding to the States, the section 10 incidental take permit process, and cooperative programs with private and public landholders and tribal nations provide greater incentives and conservation benefits than does the designation of critical habitat.

12. *Comment:* A commenter stated that the Service improperly excluded habitat areas that are essential to the conservation of the species and that were included in the 1999 designation because they did not qualify based on either the criteria for breeding sites or the criteria for wintering sites. The Service failed to provide an adequate explanation of these criteria or any justification for the application of the criteria. Any areas included in the 1999 designation that are not included in the proposed designation must be identified and the reasons for the reversal must be explained. They state that an agency changing a prior decision must apply a reasoned analysis.

**Our Response:** The Service in issuing this new designation of critical habitat for the West Coast WSP conducted a new evaluation in order to determine what habitat features are essential. Further, new information has become available since the previous designation of critical habitat. We do not believe it is necessary to identify all changes from the previous CH designation; this new designation supercedes the previous designation. We also believe that a reasoned analysis is provided to justify the final designation of critical habitat for this population.

#### *Comments Related to Site-Specific Areas and Unoccupied Areas Identified for Possible Inclusion*

13. *Comment:* One commenter stated that the Service’s assertion that human activity is the primary threat to plovers is erroneous as animal predators are more responsible for plover kills. The commenter opines that the Service should focus its efforts on predator controls over global land use and development restrictions. Another commenter states that human activity reduces the adverse effects of predators and increases the plover’s success.

**Our Response:** We agree with the commenter that predators may directly kill and injure more plovers than

humans do. However, we don’t agree that human activity in an area reduces the adverse effects of predators on plovers. Red foxes, crows, and ravens all may be equally or more effective at preying upon plovers in areas which are subject to human activity; plovers in contact with humans are probably more likely to be flushed from their nests and subject to subsequent predation. We do agree that a reduction of predation is beneficial to plovers; nest exclosures, predator-proof trash receptacles, and both lethal and non-lethal control of predators have been successful in reducing the impacts of predators on plover reproduction and survival. We believe that effective conservation measures for enhancing reproduction and survival can include a combination of actions to reduce both predator and human effects, depending upon the specific threats which need to be addressed.

14. *Comment:* Two commenters recommended that Clatsop Spit (OR–1) be considered occupied because the Necanicum River Spit (OR–1B) had confirmed breeding plovers in 2000 and 2002.

**Our Response:** Our definition of occupancy required that the unit be occupied by snowy plovers at the time of listing. The definition of critical habitat in the ESA refers to habitat occupied at the time of listing, and Congress has established different criteria for designating habitat not occupied at the time of listing. Monitoring data from 1991 to 1995 indicate that the area in question was likely unoccupied in 1993 at the time of the plover’s listing. Consequently, critical habitat units that were unoccupied during that period, but later occupied, were considered unoccupied for the purposes of this designation. The units described above were not designated as critical habitat because they were not found to be essential to the conservation of the species.

15. *Comment:* One commenter believed that Sand Lake North (OR–5A) should not be included in the critical habitat designation because it was viewed as having little recovery benefit in the draft Oregon coast-wide Habitat Conservation Plan (DHCP) process.

**Our Response:** We agree with the commenter. Sand Lake North (OR–5A) has not been designated as critical habitat.

16. *Comment:* Three commenters recommended adjusting the northern boundary of the Siltcoos River Spit unit (OR–8A) to correspond with the edge of the dry sand nesting season restriction that is approximately 0.6 mile (0.96 kilometer) north of the Siltcoos River



mouth. A separate commenter noted that the "breach" just north of the Siltcoos River is a winter site that warrants special management consideration.

*Our Response:* We agree with the commenters, and have adjusted the northern boundary of the critical habitat unit to correspond with the 2005 snowy plover management area.

17. *Comment:* One commenter suggested adjusting the southern boundary of the Dunes Overlook/Tahkenitch Creek Spit (OR-8B) critical habitat unit to match the off-highway vehicle closure boundary.

*Our Response:* We agree with the commenter and have made this adjustment.

18. *Comment:* One commenter recommended that Tenmile Creek Spit (OR-8D) be reduced in size to no more than 100 feet north and 100 feet south of Tenmile Creek to maintain the current population and no more than 100 yards north and south to accommodate recovery.

*Our Response:* We did not modify the critical habitat designation. Reducing the size of this critical habitat unit would reduce protections afforded by the designation to highly mobile chicks during the rearing period, and to nesting and wintering adults.

19. *Comment:* Two commenters suggested the southern boundary of Coos Bay North Spit (OR-9) be moved from  $\frac{1}{3}$  to  $\frac{1}{2}$  mile north of the jetty because western snowy plovers do not nest on the beach in that area. Another commenter recommended that we move the northern boundary of OR-9 about  $\frac{1}{4}$  mile south of the New Carrissa because western snowy plovers do not nest on the beach in that area.

*Our Response:* We did not make the requested adjustment. Reducing the size of this critical habitat unit would reduce protections afforded by the designation to highly mobile chicks during the rearing period, and to nesting and wintering adults.

20. *Comment:* Two commenters wanted to exclude the sand road behind the foredune in OR-9 as this is used for recreation and access by Corps of Engineers.

*Our Response:* The foredune road at Coos Bay North Spit (OR-9) currently bisects a large habitat restoration (HRA) area that is managed and maintained as a breeding area. The management of the site includes closing the foredune road from 15 March to 15 September each year to reduce human disturbance and to facilitate brood movement from the HRA to the beach. Two alternate routes are available to access the north jetty, both of which avoid the HRA. These

alternate routes are suitable to accommodate routine use. Consequently, we did not modify the designation in response to the commenters' suggestion.

21. *Comment:* Three commenters suggested moving the southern boundary of Bandon to Floras Lake unit (OR-10A) about 0.6 miles north since the area immediately west of Floras Lake is managed cooperatively with Curry County. Another commenter wanted to reduce the size of OR-10A to just those sites actually used by breeding snowy plovers with no more than a 100-yard buffer to the north and south of those sites.

*Our Response:* We did not make the requested adjustments. Reducing the size of the critical habitat unit reduces protections afforded by the designation to highly mobile chicks during the rearing period, and to nesting and wintering adults as the Pacific Coast WSP expands with recovery.

22. *Comment:* Many commenters (including a number of form letters) suggested removing the proposed Lake Earl unit (CA 1) from the final designation, while other commenters suggested eliminating the northern part, or the entire unit due to economic reasons, its narrowness, steep slope, and unsuitability resulting from dense European beachgrass. Commenters also questioned the value of designating critical habitat at the Lake Earl lagoon, stating that the Service has failed to show that nesting ever occurred at the unit's location.

*Our Response:* We agree with those commenters that provided information regarding the unsuitability of the narrow, northern portion of the proposed Lake Earl unit. The boundaries of the Lake Earl unit have been adjusted to remove the narrow, unsuitable portion to the north. The unit has been expanded to the State Park boundary to the south, resulting in an overall reduction in the unit's size. However, we believe that the remainder of the unit is important geographically to other essential habitat areas for the conservation of the Pacific Coast WSP. Lake Earl was designated as critical habitat because of its importance as a wintering area and its potential to support significant breeding populations. Plovers have been observed in the Lake Earl lagoon system during the breeding season in 1991 (PRBO, unpublished data) and nesting at Lake Talawa in 1997 (Page *et al.* 1981). We believe the economic impact presented by commenters is overstated because the current importance of the unit to plovers is based primarily on its utility as wintering habitat. Impacts to

OHV and other recreational uses are minimal because much of the revised unit is difficult to access in winter due to the open breach of the Lake Earl lagoon.

23. *Comment:* One commenter states that the Arcata Fish and Wildlife Office has failed to meet with the representatives and citizens of Del Norte County to discuss how critical habitat designation may restrict recreational use, reduce land values, and effect the breaching of lakes.

*Our Response:* Staff from the Arcata Fish and Wildlife Office provided a presentation on the proposed critical habitat and answered questions at a Del Norte County Board of Supervisors (Board) meeting on March 8, 2005. The Arcata office held an additional public meeting in the Board's chambers on June 9, 2005, to discuss issues with the public regarding critical habitat designation. At both meetings, staff stated that restrictions applied to recreation and other uses within suitable plover habitat are dependant on the managing entity's actions, and are usually implemented in an effort to avoid take of a listed species rather than as a result of critical habitat designation. Service staff also stated that they are not qualified to make economic determinations regarding land values, and advised the Board and meeting participants to review the economic analysis when it became available. Service staff also discussed their January 05, 2005 biological/conference opinion for the 10-year Permit to breach the Lake Earl sandbar. In that biological opinion, no restrictions were imposed as a result of the proposal to designate critical habitat at the breach site (Section 7 consultation 8-14-05-2577).

24. *Comment:* A few commenters believed that the Clam Beach/Little River subunit should not be designated as critical habitat because of impacts to recreational uses and the resultant impacts to the local economy. One commenter mentioned that he had in his possession an informal survey support the impacts attributed to plover management activities.

*Our Response:* The draft Economic Analysis does not attribute a significant fiscal impact to designating critical habitat at the Clam Beach/Little River subunit (CA 3A). Additionally, the Humboldt County Public Works Department has stated that visitation is increasing at Clam Beach County Park (within subunit CA 3A), further indicating that visitor use is not significantly affected by plover management or potential critical habitat designation.



25. *Comment:* Many people (including signers of several petitions and form letters) commented on the proposed Dillon Beach (CA 7) unit. Overall, six supported designation of the unit; 14 did not state their position but requested information or public hearings, or suggested foci for the economic assessment; and the rest were opposed to the designation. Of those opposed, all but three indicated concern over loss of access to the beach. Other concerns raised included potential negative impacts to small businesses and local property values due to loss of beach access (94 commenters); and a perception that the proposed unit is not important to WSP conservation since snowy plovers do not nest there (458 commenters). People also disputed the conservation importance of the site, claiming that some other site would be better (39 commenters), and that the plovers are doing well enough at Dillon Beach to make critical habitat designation unnecessary (39 commenters). Four commenters pointed out that the identification of humans and pets as potential threats in the unit description implies an intent to restrict access by humans and pets. One hundred eight commenters requested a public workshop or hearing. Additional points raised included a concern that designation would influence state or local agencies to restrict recreational activities or land-use permits in the area. One commenter also argued that since plovers from outside the listed coastal population over winter on California beaches, there is no way to know whether those at Dillon Beach are from the listed or unlisted population.

*Our Response:* This unit was excluded from critical habitat designation under section 4(b)(2) of the Act, primarily based upon the landowner's willingness to enter a partnership ensure conservation (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act). We identified the Dillon Beach site as essential to the conservation of the species because it has the essential habitat features, and because surveys have found higher populations of wintering plovers there than any other coastal site north of San Francisco (Page *in litt.* 2003). Adult over wintering survival is essential to the recovery of the population (Nur et al 1999). The surveys have also consistently noted numerous plovers banded as chicks at other coastal beaches, indicating that all or a substantial portion of plovers at the site are from the listed population (Watkins, *in litt.* 2005). In response to

the requests for a public workshop or hearing, we hosted a well-attended public workshop in the area on February 14th, 2005, where these points were explained.

26. *Comment:* Several people commented on the units proposed for Sonoma, Marin and San Francisco Counties. One comment was on behalf of the Pt. Reyes National Seashore in support of the designation. Another was written at the public workshop held for Dillon Beach, and was generally supportive. A third letter provided information regarding pets at Limantour Spit (CA 9) but was otherwise neutral. The final two letters were neutral but encouraged us to include additional areas; specifically Ocean Beach, San Francisco County, and Salmon Creek and Doran Spit, Sonoma County.

*Our Response:* We appreciate the information and support provided, and support the habitat restoration measures outlined by the Pt. Reyes National Seashore. We have decided not to include the suggested additional areas because they do not meet our three criteria from the Methods section: They do not support either sizeable nesting populations or wintering populations, nor do they provide unique habitat or facilitate genetic exchange between otherwise widely separated units. Although we do not consider these areas essential for recovery, we do consider them important, and will continue to review projects in these areas that might affect WSP as required by sections 7 and 10 of the Act.

27. *Comment:* One commenter requested the Service exclude, under section 4(b)(2) of the Act, certain lands within the Oceano Dunes State Vehicular Recreation Area (ODSVRA), from the designation of critical habitat for the western snowy plover for economic and other reasons. The commenter suggested that because no direct public access exists from the south, the structure of the park requires vehicles to drive along the shoreline, through areas proposed for critical habitat, to access areas of the dunes used by off-road vehicles.

*Our Response:* In the final rule, we have removed the heavily disturbed open riding area of the ODVRA from the entrance of the park and extending to the southern enclosure. The remainder of this unit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

28. *Comment:* The same commenter stated that economic costs of inclusion (at ODVRA) are great.

*Our Response:* This unit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

29. *Comment:* The same commenter pointed out that conservation measures have been implemented at ODVRA that have resulted in an increase in the number of nesting western snowy plovers, as well as an increase in their fledg rate, at this site.

*Our Response:* We agree with the commenter that conservation measures implemented at ODVRA have been very effective, resulting in increased numbers of nesting western snowy plovers. Consequently, during the 2004 nesting season, ODVRA supported approximately 4.6 percent of the coastal population of western snowy plovers. Of the 147 nests located at this site in 2004, 95 percent were found within the areas managed for western snowy plovers (State Parks 2004).

30. *Comment:* The same commenter stated that State Parks is currently preparing a Habitat Conservation Plan (HCP) for the San Luis Obispo Coast District including the ODVRA.

*Our Response:* We are aware that State Parks is preparing a draft HCP for this area. It is not our policy to exclude areas from critical habitat based upon management plans which have not yet been made available for our review. However, this unit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

31. *Comment:* Two commenters requested exclusion of three parcels (identified as the McDonald site (16.2 acres), the Sterling site (approximately 7 acres), and the Lonestar site (39 acres)) along the coastline of Sand City from critical habitat for the western snowy plover, stating that a 1996 Memorandum of Understanding (1996 MOU) between the California Department of Parks and Recreation, Monterey Peninsula Regional Parks District, City of Sand City, and Sand City Redevelopment Agency established a plan that “\* \* \* would actively manage (western snowy plover)/human interaction, thus maximizing the likelihood of (western snowy plover) recovery \* \* \*.”

*Our Response:* We have reviewed the 1996 MOU. At no point does it mention



western snowy plovers or their management. It does state that the signatories “desire” to “(s)upport efforts to restore sand dunes and associated dune vegetation and habitat” and “(c)reate and preserve a north/south habitat corridor for endangered and threatened species”. However, the 1996 MOU does not outline any specific actions to meet the habitat needs of western snowy. However, this unit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

32. *Comment:* Two commenters requested exclusion of three parcels (as described above) along the coastline of Sand City from critical habitat for the western snowy plover, stating that a habitat conservation plan (HCP) being developed for the area is likely to assist in the recovery of the species and that designation of critical habitat within the subject parcels could disrupt the HCP planning process.

*Our Response:* We are available to assist non-federal landowners in development of HCPs that address listed species, including the western snowy plover. However, the ongoing development of a draft habitat conservation plan does not assure that the plan will be adequate or implemented. This unit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

33. *Comment:* A commenter requested exclusion of three parcels (as described above) along the coastline of Sand City from critical habitat for the western snowy plover, stating that there would be little benefit to designating critical habitat within the subject parcels (largely because the commenter believes that there would be no consultation under section 7 of the Act for activities within those parcels).

*Our Response:* This unit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act). The primary benefit of any critical habitat with regard to activities that require consultation pursuant to section 7 of the Act is to ensure that the activities will not destroy or adversely modify designated critical habitat. We believe that the commenter's conclusion

that activities within the subject parcels would not require section 7 consultation(s) is premature. At a minimum, the Service would be required to conduct an internal section 7 consultation before any incidental take permit could be issued through the HCP process. Any other action authorized, funded, or carried out by a Federal agency that may affect a listed species would also require section 7 consultation.

34. *Comment:* A commenter requested exclusion of three parcels along the coastline of Sand City (as described above) from critical habitat for the western snowy plover, stating that designation of critical habitat within the subject parcels would have adverse economic effects on the City of Sand City by preventing future development activities within the subject parcels.

*Our Response:* This unit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

35. *Comment:* A commenter requested exclusion of three parcels (as described above) along the coastline of Sand City from critical habitat for the western snowy plover, stating that because the subject parcels account for only approximately 20 percent of the Sand City coastline and represent marginal habitat, that their development would not impede recovery of the species.

*Our Response:* The majority of documented western snowy plover nests along the Sand City coastline have occurred within the three subject parcels (Noda *in litt.* 2003). In addition to breeding habitat, Sand City beaches have provided habitat for wintering western snowy plovers (Noda *in litt.* 2003). However, this unit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

36. *Comment:* One commenter requested the Service minimize the areas of the Nipomo Dunes and Morro Bay designated as critical habitat for the “coastal plover”.

*Our Response:* This unit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

37. *Comment:* One commenter suggested that two beaches in Santa Barbara County (East Beach and the breakwater Sand Spit in Santa Barbara Harbor) should be included in the final rule. The commenter also stated that these two sites were included in the 1999 final rule, but were excluded in our proposed rule without explanation. The exclusion of these two beaches without proper documentation and analysis is unsupported.

*Our Response:* Our current designation of critical habitat is different from the 1999 rule in two primary ways. In this designation, we utilized a different methodology for determining essential areas, and we relied upon additional scientific information which was not available in 1999. Thus, this rule, while similar in many respects to that in 1999, is a new designation, and does not designate the same areas.

38. *Comment:* Several commenters noted a discrepancy between the description of subunit CA 19A and the map for this subunit. The subunit is described as extending 6.1 mi (9.8 km) along the coast from the north jetty of the Channel Islands harbor. However the map of this subunit (Map 54) depicts it as starting about 1 mile north of the jetty. The commenters noted that the area immediately north of the jetty is known as Hollywood Beach and is an “active critical habitat area of the western snowy plover.”

*Our Response:* Although the description of subunit CA 19A in the proposed rule included the Hollywood Beach area, an error was made during the preparation of the maps and Hollywood Beach was inadvertently not shown. We have now corrected that error, and Hollywood Beach is included in this final designation for the plover.

39. *Comment:* A commenter pointed out that, although the 2004 proposed rule states that all 61 ac proposed for designation at unit CA 13 (Pt. Sur Beach) are privately owned, a portion of the 61 ac is actually state lands. If the intent of the critical habitat designation is only to include private lands, then the commenter objects because the habitat features essential for the conservation of the plover are equally present in both the public and private portions of the unit and both public and private lands should be included.

*Our Response:* A table in the proposed rule (69 FR 75608) erroneously listed unit CA 13 as being private land. In actuality, unit CA 13 is entirely made up of State-owned land as stated in the text description for the unit.



40. *Comment:* A commenter stated that one of the functions of the jetty at the south end of subunit CA 19A is to act as a sand trap. Every 2 years they are required to dredge sand from this location and transport it farther south along to coast where there is erosion occurring. The commenter further noted that the biannual dredging has been ongoing for 40 years, and that the discontinuation of dredging could result in the creation of extremely hazardous conditions to vessels in the area. The commenter urged the Service to remove this sand trap area from the designation.

*Our Response:* Hollywood Beach, the area north of the jetty to which the commenter is referring is both a nesting and a wintering area for snowy plovers and has been determined to contain features essential to the conservation of the species. Therefore, we have included it in this final designation. We also point out that the designation of critical habitat does not prevent the sand dredging from occurring. If the action is permitted or authorized by a Federal agency, the Service would likely be involved with or without the critical habitat designation through a section 7 consultation with the Federal agency. We will continue to work with dredging operators to ensure endangered species conservation is made compatible with the safety of all vessels.

41. *Comment:* A commenter requested that two areas within or near the city of Morro Bay not be included in the designation. The commenter characterized the area south of Highway 41/Atascadero Road to Morro Bay Rock in subunit CA 15B as being heavily used for recreation and including parking lots, restrooms, lifeguard towers. The commenter also stated that we were in error when we said that subunit 15B is near the city of Morro Bay and is managed entirely by the California Department of Parks and Recreation. The area south of Atascadero Road is within the city limits and is owned and managed by the city. Similarly, the commenter stated we were in error when we said that the area south of Atascadero Road is an important breeding area supporting up to 40 nests each year when in fact there has never been any documentation of nesting or breeding in this area.

The second area the commenter requested not be included in subunit CA 15B extends north from Azure Street to the north end of the subunit. The commenter characterizes this area as being heavily populated with hundreds of homes and a State campground with thousands of visitors per year. The commenter further noted that few nests have been observed in this area and

only in some years does nesting occur at all in the area.

*Our Response:* When we stated in the proposed rule (69 FR 75608) that subunit 15B was an important breeding area supporting up to 40 nests each year, we were discussing the entire subunit, not just the area south of Atascadero Road. However, as no nests have been documented for the area south of Atascadero Road and this area is highly disturbed, we have removed it from the designation as not being essential to the conservation of the plover. The remainder of this subunit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

42. *Comment:* A commenter requested that Hueneme Beach Park in subunit CA 19B not be included in the designation. The commenter characterized the park as a highly disturbed and heavily used recreational resource that is not appropriate for critical habitat. The park includes a fishing pier, picnic tables, barbeques, restaurant, parking lots, dog walk, and volleyball courts, and is also the location of biennial sand replenishment activities.

*Our Response:* Based on the information provided by the commenter and because there are no nesting plovers in the area, we have removed Hueneme Beach Park from subunit CA 19B because it is highly disturbed and not essential to the conservation of the western snowy plover. However, the remainder of subunit CA 19B has been designated as critical habitat.

43. *Comment:* A commenter requested that the Santa Barbara Harbor from Pt. Castillo to Salinas Creek and including the sand spit at the end of the breakwater be included in the critical habitat designation as it was in 1999.

*Our Response:* Although the area to which the commenter is referring was included in the 1999 designation (64 FR 68508) as CA-14 unit 2—Point Castillo/Santa Barbara Harbor Beach, we used a different methodology and set of criteria to determine critical habitat in the 2004 proposal (69 FR 75608). The Point Castillo/Santa Barbara Harbor Beach area was not included in the 2004 proposal because it did not meet the criteria for critical habitat established for the designation.

44. *Comment:* A commenter believes that the expansion of critical habitat in CA-18, Devereux Beach would be an ineffective form of conservation for the plover. As stated in the proposed designation (69 FR 75608), "In 30 years

of implementing the Act, the Service has found that the designation of statutory critical habitat provides little additional protection to most listed species, while consuming significant amounts of available conservation resources." Furthermore, research conducted by Lafferty (2001) at Coal Oil Point indicates that expansion of the fenced area on the beach did not provide comparable gains in plover protection.

*Our Response:* This unit does not represent an expansion. This area was included in the original 1999 critical habitat designation for the plover (64 FR 68508) as CA-14, unit 1—Devereux Beach. In the original designation, the unit contained approximately 57 ac, while in the 2004 proposed rule, the unit is only 36 ac. The referenced fenced area is for the protection of nesting plovers. However, nesting plovers may forage over the entire beach and plovers also winter over the entire beach. Therefore, we have designated Devereux Beach as critical habitat for the plover, not just the area that is fenced to protect nesting plovers.

45. *Comment:* Another commenter noted that the California Coastal Commission has banned dogs from Devereux Beach (unit CA 18) where critical habitat has been designated and that the area designated at Devereux Beach should be reduced.

*Our Response:* Devereux Beach is both a plover breeding area and a wintering area, with as many as 360 wintering birds. Unit CA 18 also contains the physical and biological features essential to the conservation of the species. Therefore, we have designated 36 ac in this area as critical habitat for the plover, which is reduced from the approximately 57 ac designated in this area in 1999 (64 FR 68508).

46. *Comment:* Los Padres National Forest concurred with the decision of the Service not to include in the critical habitat designation location CA-69 (San Carpoforo Beach) from the draft recovery plan for the western snowy plover. San Carpoforo Beach is a very small beach that is occupied mainly by a few (about 35) wintering plovers.

*Our Response:* We concur. San Carpoforo Beach was not included in the critical habitat designation because it did not meet the criteria we set forth in this final designation.

47. *Comment:* One commenter applauded the Service for designating critical habitat for the plover in San Luis Obispo, Santa Barbara, and Ventura Counties, but also stated that all areas occupied by plovers should be designated.



*Our Response:* The Act states, at section 3(5)(C), that except in particular circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species. We have designated habitat that contain sufficient features essential for the conservation of the species.

48. *Comment:* One commenter asked that Morro Bay's sandspit and beach [CA 15C] not be designated.

*Our Response:* This subunit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

49. *Comment:* One commenter believed that San Buenaventura Beach should be included as it was in the 1999 designation.

*Our Response:* Although the area to which the commenter is referring was included in the 1999 designation, we used a different methodology and set of criteria to determine critical habitat in the 2004 proposal (69 FR 75608). The San Buenaventura Beach area was not included because it did not meet the criteria for critical habitat established for the designation.

50. *Comment:* Two commenters stated that, since the criteria used to determine critical habitat for the western snowy plover are improper, those areas in San Luis Obispo, Santa Barbara, and Ventura Counties that were included in the 1999 designation but excluded in the 2004 proposal (Arroyo Hondo, Arroyo Laguna, Torro Creek, Jalama, Point Castillo/Santa Barbara Harbor, Carpinteria Beach, and San Buenaventura) should be included as critical habitat. These beaches should be included in the final designation as they are utilized by the species for wintering, they contain the identified primary constituent elements that may require special management, and the sites are essential to the survival and recovery of the plover.

*Our Response:* Although the areas to which the commenters are referring were included in the 1999 designation, we used a different methodology and set of criteria to determine critical habitat in the 2004 proposal (69 FR 75608). These areas were not included in the 2004 proposal because they did not meet the criteria for critical habitat established for the designation.

51. *Comment:* A commenter stated that the Guadalupe/Nipomo Dunes National Wildlife Refuge should be included in the final designation and

that the Service's exclusion of this area because it is subject to a "plover management plan" that has undergone section 7 review was improper. No information was provided on the management plan to determine whether or not the plan provides a conservation benefit or otherwise meets the Service's criteria for adequate plans. In addition, the fact that the plan has undergone section 7 consultation does not demonstrate that the plan provides any benefits for the plover. The Service also failed to adequately balance the benefits of inclusion vs. the benefits of inclusion for the area when it was excluded.

*Our Response:* We have now included more detailed information on the Guadalupe/Nipomo Dunes National Wildlife Refuge plover management plan in this final rule. The refuges meet our criteria for management plans. See the Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section below for a detailed discussion of our exclusion of this refuge.

52. *Comment:* One commenter noted two areas in Orange County that were not proposed for critical habitat but are used by wintering plovers and constitute high quality habitat. One area is Surfside Beach in northern Orange County and the other is Newport Beach between Balboa Pier and the entrance to Newport Bay.

*Our Response:* Snowy Plovers were not discovered using these sites until the fall of 2004. We recognize that both locations support high quality habitat with large concentrations of snowy plovers, and have the potential to support breeding birds. However, the Service did not determine these areas to be essential to the conservation of the DPS and they were not designated as critical habitat. We are working with local jurisdictions and managers to reduce the threats to snowy plovers at these sites.

53. *Comment:* Two commenters stated that the Subunit CA 21D, Hermosa State Beach, is located in a heavily populated urban environment and should not be considered critical habitat. They also expressed concern over future restrictions on beach use.

*Our Response:* Hermosa Beach annually supports a relatively large wintering flock of snowy plovers (69 FR 75627). This flock persists despite the heavy recreational use of the beach area. Nearly all beaches in southern California are subject to heavy recreational use. To restrict snowy plovers to beaches without heavy recreational use would limit the plovers to few if any beaches in southern California.

54. *Comment:* Some commenters questioned the value of designating critical habitat at the Lake Earl lagoon (CA 1), and state that the Service failed to show that nesting ever occurred at the unit's location.

*Our Response:* Plovers were observed during the breeding season west of the Lake Earl lagoon during a breeding season window survey in 1991 (PRBO unpublished data). No plovers were observed during the subsequent survey in 1995 (an incomplete survey year, PRBO unpublished data). Page, et al., 1981, states that nesting plovers were found on the beach at Lake Talawa (*i.e.* western most portion of the Lake Earl lagoon system) during May, 1997. Yocom and Harris suspected breeding at the same location in 1975, but were unable to confirm it. Plovers currently overwinter within the designated CA 1 unit.

55. *Comment:* One commenter states that the Arcata Fish and Wildlife Office has failed to meet with the County of Del Norte and private citizens to comment on restricted recreational use, loss in land values, and effects on the "Federal project" of breaching lakes.

*Our Response:* Staff from the Arcata Fish and Wildlife Office provided a presentation on the proposed critical habitat and answered questions at a Del Norte County Board of Supervisors (Board) meeting on March 8, 2005, at the Board's request. The Arcata office held an additional public meeting in the Board's chambers on June 9, 2005, to discuss issues with the public regarding critical habitat designation. At both meetings, staff stated that restrictions applied to recreation and other uses within suitable plover habitat are dependant on the managing entity's actions, and are usually implemented in an effort to avoid take of a listed species rather than as a result of critical habitat designation. Staff also stated that they are not qualified to make economic determinations regarding land values, and further stated that is why the Service contracts out the economic analysis for designation. With regards to the "Federal Project" of breaching the Lake Earl lagoon system, Service staff referenced the recently completed biological/conference opinion (January 05, 2005) for the 10-year Permit to breach the Lake Earl sandbar. No mitigation, protective measures, or restrictions on the proposed action, or any activity, were imposed as a result of the proposal to designate critical habitat at the breach site (Section 7 consultation 8-14-05-2577). If not for the Federal action (*i.e.* mechanical breaching), the lagoon would breach on its own at a higher water level.



56. *Comment:* One commenter stated that the Service's assertion that human activity is the primary threat to plovers is erroneous as animal predators are more responsible for plover kills. The commenter opines that the Service should focus its efforts on predator controls over global land use and development restrictions. Another commenter states that human activity lowers the adverse effects of predators, and increases the plover's success.

*Our Response:* We agree with the commenter that predators are likely responsible for more direct kills and injuries; however, humans have contributed to the impacts of predators. Nest and chick predators have been introduced into areas where they are not native, and impact the reproductive success and survival of plovers (e.g. red fox). When humans and their pet flush nesting plovers on sandy beaches, the plovers leave tracks in the sand as they move off and on to the nest. Corvids use the plover tracks to locate nests, increasing the opportunities for successful nest predation. Human development and trash in and adjacent to suitable plover habitat has increased the incidence of some plover predators (ravens and crows). Additionally, human activities, such as development and beach raking, have rendered some beach sections totally unusable to breeding plovers, reducing the number of areas suitable for nesting. The areas with the highest predation rates usually do have some predator management associated with them. Nest enclosures, predator-proof trash receptacles, aversions conditioning, and both lethal and non-lethal control of predators has been successful in reducing the impacts of predators on plover reproduction and survival. We believe that these actions implemented to reduce the impact of predators on plover nesting, and other management measures designed to reduce the potential impacts of humans (e.g. use of symbolic fencing, public education, and enforcement of regulations), are responsible for the increases in plover breeding success documented at many locations.

#### *Comments Related to Military Lands*

57. *Comment:* A commenter stated Vandenberg Air Force Base should not be excluded unless there is a final integrated natural resources management plan.

*Our Response:* All lands essential to the conservation of the western snowy plover at Vandenberg have been excluded under section 4(b)(2) of the Act from the final designation of critical habitat because of alternative protective measures provided by the Air Force and

because of the national security issues the Air Force stated in their February 7, 2005, comment letter (see the Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section below for a detailed discussion).

58. *Comment:* The Air Force submitted several comments relating to the exclusion of Vandenberg Air Force Base (Vandenberg) from critical habitat. They state that: (1) The Air Force has worked with the Service to revise the INRMP (which is expected to be completed in 2005), and that the INRMP contains special management activities that adequately address the conservation of suitable habitat important to long-term protection and recovery of the western snowy plover; (2) the western snowy plover and its habitat are already being protected at Vandenberg by the Air Force's Beach Management Plan; (3) all the proposed critical habitat areas on Vandenberg are occupied throughout the year and subject to consultation pursuant to section 7 of the Act; (4) the INRMP and Beach Management Plan together provide a greater level of protection for the western snowy plover and its habitat than a designation of critical habitat would provide; and (5) that the designation of critical habitat at Vandenberg would interfere with its mission execution and military training critical to national security.

*Our Response:* All lands essential to the conservation of the western snowy plover at Vandenberg have been excluded under section 4(b)(2) of the Act from the final designation of critical habitat because of alternative protective measures provided by the Air Force and because of the national security issues the Air Force discussed in their February 7, 2005, comment letter (see the Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section below for a detailed discussion).

59. *Comment:* The Navy commented that Naval Base Ventura County has a finalized INRMP that contains management actions that benefit the western snowy plover and its habitat. Naval Base Ventura County also has a biological opinion from the Service (issued on June 6, 2001) for all routine operations, a major part of which covers the western snowy plover. The INRMP incorporates all management actions being carried out by Naval Base Ventura County in response to the biological opinion.

*Our Response:* We have reviewed Naval Base Ventura County's INRMP and biological opinion. The Secretary determined, in writing, that Naval Base

Ventura County's INRMP provides a benefit to the western snowy plover and therefore, consistent with Public Law 108-136 (Nov. 2003): Nat. Defense Authorization Act for FY04 and Section 4(a)(3) of the Act, the Department of Defense's Naval Base Ventura County is exempt from critical habitat based on the adequacy of their legally operative INRMP (see the Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section below for a detailed discussion).

60. *Comment:* The U.S. Navy requested that their facilities around San Diego Bay that were included in the proposed critical habitat, including NAS North Island, NAB Coronado, Naval Radio Receiving Facility, and NOLF Imperial Beach, be excluded from the final critical habitat as they are covered by an INRMP that provides a benefit to the species.

*Our Response:* The Secretary has determined the San Diego Bay Navy INRMP provides a benefit for the western snowy plover; accordingly, the Navy's San Diego Bay facilities are exempt from critical habitat designation pursuant to section 4(a)(3) of the Act, based on the adequacy of their legally operative INRMP (see the Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section below for a detailed discussion).

61. *Comment:* Marine Corps Base, Camp Pendleton commented that snowy plover habitat on the base receives substantial benefit from management actions directed through their Integrated Natural Resource Management Plan (INRMP). Therefore, all lands on Camp Pendleton should be excluded from the Final Rule, per Section 4(a)(3) of the Act, as amended by the 2004 Defense Authorization Act.

*Our Response:* Camp Pendleton actively manages snowy plover nesting and wintering habitat and this management has contributed to an increasing snowy plover population on the base over the past several years. The INRMP reinforces management actions stipulated under previous Section 7 consultations with the Service. The Secretary has determined the San Diego Bay Navy INRMP provides a benefit for the western snowy plover; accordingly, the Navy's San Diego Bay facilities are exempt from critical habitat designation pursuant to section 4(a)(3) of the Act, based on the adequacy of their legally operative INRMP (see the Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section below for a detailed discussion). However, we note that not all lands within Camp Pendleton are



covered by the INRMP subject to Marine Corps management. Unit CA 24 is located at the far north end of the base on land leased to the California Department of Parks and Recreation, and is therefore actively managed by State Parks and not by the Base. The San Onofre State Beach within unit CA 24 is a recreational beach utilized by thousands of people throughout the year. Despite this heavy use, the beach is annually used by a substantial wintering flock of snowy plovers (69 FR 75628). As described in the proposed rule, this flock and the habitat that it utilizes are subject to disturbance due to the heavy recreational use of the area, which also likely precludes the use of the beach for breeding. With special management, the habitat in the proposed unit has a high potential to be managed and restored to a point where it is used by plovers for both breeding and wintering. Accordingly, we consider this beach to meet the definition of critical habitat and it is included in this designation.

62. *Comment:* Camp Pendleton also commented that the proposed critical habitat potentially impacts their military mission due to constraints on lands that have value for military training and operations. They particularly objected to the designation of critical habitat on Green Beach, an amphibious landing and training beach.

*Our Response:* We have refined our mapping for Unit CA 24 to more accurately define the essential snowy plover habitat between San Onofre Creek and San Mateo Creek. The majority of snowy plover use in this area currently is located in a less visited portion of the beach closer to the midpoint between the two creek mouths. The result of this refined mapping is a reduction in the length of the proposed unit at both ends, removing critical habitat from Green Beach as well as beach areas to the north of San Mateo Creek mouth.

#### *Comments Related to HCPs, NCCP Program, and Section 7*

63. *Comment:* Several commenters stated that the Pacific Coast WSP already had adequate protections under Section 7 of the Act, and therefore did not need to provide additional protection afforded by designating critical habitat.

*Our Response:* A critical habitat designation means that Federal agencies are required to consult with the Service on the impacts of actions they undertake, fund, or permit on designated critical habitat. While in many cases, these requirements may not provide substantial additional

protection for most species, they do direct the Service to consider specifically whether a proposed action will affect the functionality of essential habitat to serve its intended conservation role for a species rather than to focus exclusively on whether the action is likely to jeopardize the species' continued existence. We agree, however, that even absent a critical habitat designation, Federal agencies are still required to consult on the impacts of their activities on listed species and their habitat.

#### *Comments Related to Economic Impacts and Analysis; Other Relevant Impacts*

64. *Comment:* Several commenters stated that the DEA inappropriately ignores benefits although it is possible to quantify the economic benefits associated with species protection. One commenter offers, for example, that contingent valuation studies have demonstrated existence value of non-human species. Another commenter states that the DEA should consider "non-use" welfare benefits, such as existence, option, stewardship, and bequest values, associated with protecting plover habitat.

*Our Response:* In the context of a critical habitat designation, the primary purpose of the rulemaking (*i.e.*, the direct benefit) is to designate areas in need of special management that contain the features that are essential to the conservation of listed species.

The designation of critical habitat may result in two distinct categories of benefits to society: (1) Use; and (2) non-use benefits. Use benefits are simply the social benefits that accrue from the physical use of a resource. Visiting critical habitat to see endangered species in their natural habitat would be a primary example. Non-use benefits, in contrast, represent welfare gains from "just knowing" that a particular listed species' natural habitat is being specially managed for the survival and recovery of that species. Both use and non-use benefits may occur unaccompanied by any market transactions.

A primary reason for conducting this analysis is to provide information regarding the economic impacts associated with a proposed critical habitat designation. Section 4(b)(2) of the Act requires the Secretary to designate critical habitat based on the best scientific data available after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. Economic impacts can be both positive and negative and by definition,

are observable through market transactions.

Where data are available, this analysis attempts to recognize and measure the net economic impact of the proposed designation. For example, if the fencing of a species' habitat to restrict motor vehicles results in an increase in the number of individuals visiting the site for wildlife viewing, then the analysis would recognize the potential for a positive economic impact and attempt to quantify the effect (*e.g.*, impacts that would be associated with an increase in tourism spending by wildlife viewers). In this particular instance, however, the economic analysis did not identify any credible estimates or measures of positive economic impacts that could offset some of the negative economic impacts analyzed earlier in this analysis.

Under Executive Order 12866, OMB directs Federal agencies to provide an assessment of both the social costs and benefits of proposed regulatory actions. OMB's Circular A-4 distinguishes two types of economic benefits: Direct benefits and ancillary benefits. Ancillary benefits are defined as favorable impacts of a rulemaking that are typically unrelated, or secondary, to the statutory purpose of the rulemaking. In the context of critical habitat, the primary purpose of the rulemaking (*i.e.*, the direct benefit) is the potential to enhance conservation of the species. The published economics literature has documented that social welfare benefits can result from the conservation and recovery of endangered and threatened species. In its guidance for implementing Executive Order 12866, OMB acknowledges that it may not be feasible to monetize, or even quantify, the benefits of environmental regulations due to either an absence of defensible, relevant studies or a lack of resources on the implementing agency's part to conduct new research. Rather than rely on economic measures, the Service believes that the direct benefits of the proposed rule are best expressed in biological terms that can be weighed against the expected cost impacts of the rulemaking.

We have accordingly considered, in evaluating the benefits of excluding versus including specific area, the biological benefits that may occur to a species from designation (see below, Exclusions Under section 4(b)(2) of the Act), but these biological benefits are not addressed in the economic analysis.

64a. *Comment:* Many commenters state that the DEA fails to distinguish costs specific to critical habitat designation from the costs of ESA listing and other co-extensive costs. One



comment states that critical habitat will not increase management as plover management is already in place.

*Our Response:* In conducting economic analyses, we are guided by the 10th Circuit Court of Appeal's ruling in the New Mexico Cattle Growers Association case (248 F.3d at 1285), which directed us to consider all impacts, "regardless of whether those impacts are attributable co-extensively to other causes." As explained in the analysis, due to possible overlapping regulatory schemes and other reasons, there are also some elements of the analysis that may overstate some costs.

65. *Comment:* Another comment stated that the DEA should not include past costs as these costs are sunk costs that can not be recouped.

*Our Response:* As part of our economic analysis, we have estimated the past costs associated with the listing of the species prior to designating critical habitat. However, we have only used the prospective estimated costs for excluding certain units from this final critical habitat designation pursuant to section 4(b)(2) of the Act (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act below).

66. *Comment:* Several commenters state that the DEA should address "other relevant impacts" in addition to the economic impacts.

*Our Response:* The Service believes the words "other relevant impacts" refer to policy issues, such as, for example fostering conservation partnerships and relations with tribal governments. These policy considerations are inappropriate for review in an economic analysis. If the Service considers excluding areas for these reasons, it conducts a separate analysis under section 4(b)(2) of the Act to balance the benefits of excluding these areas with the benefits of including them.

67. *Comment:* One commenter states that the DEA should examine the costs of not designating critical habitat and the impacts of the plover being delisted. For example, it should consider impacts of legal challenges, relisting, and the need to fund management efforts for a species further from recovery than when originally listed.

*Our Response:* As part of our economic analysis, we estimate the costs associated with those economic activities believed to most likely threaten the plover and its habitat within the boundaries of the proposed designation. Due to cost and time constraints, it is not possible for us to estimate costs associated with different listing procedures.

68. *Comment:* One commenter states that, in the DEA, the area that will experience the greatest future economic impacts from plover conservation efforts is Unit CA-12C, including the area of Sand City. The cost in this area is disproportionate to the benefit of inclusion and the area should be excluded from the final designation. The comment further states that excluding Sand City from critical habitat will contribute to a more positive climate for voluntary habitat conservation efforts, which provide greater conservation benefits than critical habitat. This comment also asserts that it can not be argued that exclusion of the land area within Sand City would lead to the extinction of the plover or appreciably reduce its recovery.

*Our Response:* As part of this final rule, we have excluded Unit CA-12C from this final critical habitat designation pursuant to section 4(b)(2) of the Act. For further information see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act below.

69. *Comment:* One comment states that Morro Bay should be excluded from CHD as the DEA identifies it as one of the high cost areas while no plovers fledged there in 2004 and only one in 2003. The costs are therefore greater than the benefits for the community. The comment further states that the critical habitat designation is not working as there were more plovers on the beach in Morro Bay before the restrictions went into place.

*Our Response:* We have excluded the Morro Bay unit from this final critical habitat designation pursuant to section 4(b)(2) of the Act (see section titled below Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

70. *Comment:* One comment noted that the Service did not provide the minimum required 60-day comment period and that comments are due only days before the court-ordered final designation deadline of September 20, 2005.

*Our Response:* The Service provided a 60-day comment period on the proposed critical habitat designation. The need to meet the court ordered deadline of September 20, 2005 made it impossible for us to open the comment period on the economic analysis for 60 days as well.

71. *Comment:* A comment on the proposed designation requests that the Service correct the mapping errors in its December 17, 2004, proposed rule to protect Sand City and landowners

should the proposed critical habitat boundaries become relevant.

*Our Response:* Our maps are used only as a general guide to assist landowners to determine the location of the boundaries of a proposed or final critical habitat designation. The legal coordinates presented at the end of this final rule represent the actual boundaries of this final critical habitat designation. As part of this rule making process, we have made every effort to ensure that our maps are as accurate as possible. The final rule, economic analysis, and supporting Geographic Information System (GIS) maps will also be available via the Internet at <http://www.fws.gov/pacific/sacramento/default.htm>.

72. *Comment:* One commenter requests that the Service clarify the exclusion of the Metropolitan's property at Ormond Beach by delineating it on the map in the final rule as this was not clear in the maps contained in the proposed rule.

*Our Response:* Our maps only depict those areas we have proposed or designated as critical habitat. We include some features on those maps so that the public can determine where the general boundaries of the proposed and final designation occur. Unfortunately, we can not have all features identified on these maps. In the case of areas excluded from the proposed and final designation, these areas would not be identified as critical habitat. Please be aware that the use of these maps is only intended to serve as a general guide for the public to determine the boundaries of critical habitat, and to determine the actual boundaries of this designation, a person should use the legal coordinates located at the end of this final rule.

73. *Comment:* One commenter suggests that it might be instructive to do a study on how many people choose not to go to a beach because it is being used by vehicles.

*Our Response:* In essence of costs and time, we have conducted our economic analysis to identify those economic activities believed to most likely threaten the plover and its habitat and, where possible, quantify the economic impact to avoid, mitigate, or compensate for such threats within the boundaries of the critical habitat designation. We found no evidence that beach use would increase if vehicle use was not permitted.

74. *Comment:* One comment states that the Arcata Fish and Wildlife Office has failed to meet with the County of Del Norte and private citizens to comment on restricted recreational use, loss in land values, and effects on the "Federal project" of breaching lakes.



*Our Response:* Staff from the Arcata Fish and Wildlife Office provided a presentation on the proposed critical habitat and answered questions at a Del Norte County Board of Supervisors (Board) meeting on March 8, 2005, at the Board's request. The Arcata office held an additional public meeting in the Board's chambers on June 9, 2005, to discuss issues with the public regarding critical habitat designation. At both meetings, staff stated that restrictions applied to recreation and other uses within suitable plover habitat are dependant on the managing entity's actions, and are usually implemented in an effort to avoid take of a listed species rather than as a result of critical habitat designation. Staff also stated that they are not qualified to make economic determinations regarding land values, and further stated that is why the Service contracts out the economic analysis for designation. With regards to the "Federal Project" of breaching the Lake Earl lagoon system, Service staff referenced the recently completed biological/conference opinion (January 5, 2005) for the 10-year Permit to breach the Lake Earl sandbar. No mitigation, protective measures, or restrictions on the proposed action, or any activity, were imposed as a result of the proposal to designate critical habitat at the breach site (Section 7 consultation 8-14-05-2577). If not for the Federal action (i.e. mechanical breaching), the lagoon would breach on its own at a higher water level.

75. *Comment:* One commenter states that the maps within the proposed rule are misleading as they do not make it clear that the majority of the designation is private property. The commenter states that 87 percent of the proposed designation is private property. The commenter also highlights that the map delineating Unit CA-1 is incorrect.

*Our Response:* As part of our proposed and final designation of critical habitat, we have done our best to present maps of those areas we have determined to be critical habitat. We have provided legal coordinates so that a landowner can determine where the proposed or final critical habitat designations exist, maps to serve as a general reference or guide of where those boundaries occur, and have provided a table indicating the quantity of the proposed and final designation that is in private ownership, or is owned by the State, Federal, or local governments. In total, approximately 3191 ac (1,296 ha) of this final designation is privately owned land. The final rule, economic analysis, and supporting Geographic Information System (GIS) maps will also be available

via the Internet at <http://www.fws.gov/pacific/sacramento/default.htm>.

76. *Comment:* One comment states that the DEA frequently uses the term "opportunity costs," but fails to mention the potential for "substitution effects."

*Our Response:* Section 4.3 and 4.4 (specifically, paragraphs 147, 152-153, 159, 171, 189, and 205, and Exhibit 4-32) of the DEA address substitution effects. In addition, the analysis acknowledges the availability of substitute sites could lower the per-trip loss. Accordingly, the DEA assumes beaches where less than ten percent of the linear extent of the beach is fenced have sufficient substitute possibilities for beach-goers such that quantification of small changes in consumer surplus is not feasible.

77. *Comment:* According to one commenter, an economic impact analysis should include the following elements: (1) Direct, indirect, and induced economic activities (output, employment and employee compensation); (2) changes in property values; (3) property takings; (4) recreational impacts; (5) business activity and potential economic growth; (6) commercial values; (7) County and State tax bases; (8) public works project impacts; (9) disproportionate economic burdens on society sections; (10) impacts to custom and culture; (11) impacts to other endangered species; (12) environmental impacts to other types of wildlife; and (13) any other relevant impacts.

*Our Response:* The DEA does not address property takings, impacts to custom and culture, impacts to other endangered species, and environmental impacts to other types of wildlife as these elements are outside of the scope of the analysis as described in Section 1. The remainder of these elements were explicitly considered and described in the DEA, and quantified where possible.

78. *Comment:* Multiple comments state the resources employed to administer plover protection (i.e., labor, fencing, monitoring, etc.) injects spending into the local economy and this should be considered in the DEA. For example, one comment states that while the DEA only includes the economic costs associated with plover research and management activities, it should be noted that these activities also bring money into Humboldt County in the form of research grants and contracts that pay graduate students, consultants, and other researchers that live in the area. The comment highlights a recent Humboldt State University (HSU) Study that indicates that each HSU student not living at home contributes

approximately \$10,000 per year to the local economy, not including state fees. Three to four graduate students at HSU have studied the plover over the past five years. Another comment states the economic benefits and income from designation, habitat protection, monitoring, and management of snowy plover and other species utilizing the habitat, and recreational and educational opportunities should be included in the DEA.

*Our Response:* The DEA acknowledges that certain communities may experience increased economic activity as a result of plover management efforts. The expenditure of management resources to protect the plover, however, represents an opportunity cost as these resources are no longer available for other uses. The fact that management expenditures generate local employment and associated spending for consultants, students and researchers represents a distributional effect rather than a compensating surplus gain.

79. *Comment:* One commenter stated that while the forecast period of the DEA is only 20 years, the Service has a duty to imagine that our ancestors will be present for hundreds or thousands of years and the birds should be here along with them.

*Our Response:* Section 1.3 of the DEA discusses the analytic time frame. To be credible, the economic analysis must estimate economic impacts based on activities that are reasonably foreseeable. A 20 year time horizon is used, because many land managers do not have specific plans for projects beyond 20 years, and forecasting beyond this time increases the subjectivity of estimating potential economic impacts (i.e., any results would run the risk of being speculative). In addition, forecasts used in the analysis of future economic activity are based on current socioeconomic trends and the current level of technology, both of which are likely to change over the long term.

80. *Comment:* Multiple comments expressed concern that while the DEA acknowledges that no data exist on whether or to what extent plover habitats might affect the use of beaches, it still applies the assumption that fewer visitors will visit a beach during breeding season. For example, several commenters highlight that no evidence exists that recreation has declined at particular sites (e.g., Coal Oil Point Reserve) where critical habitat has been designated since 1999. Further, California Department of Parks and Recreation states that they have not found that plover fencing significantly reduces visitation or diminishes



recreational experiences, except for at the Oceano Dunes State Vehicular Recreation. The comment states that data indicate that from 1995 to 2004, visitation at many state beaches showed an upward trend in visitor attendance. For example, Salinas River State Beach is one of the most productive and heavily fenced parks units in CA-12C, with 99 nests reported in 2004 over the 3.5 miles of beach habitat. Attendance figures for this park unit have steadily increased since 1997 despite critical habitat designation in 1999 and an increase in number of fenced plover nesting areas.

*Our Response:* Section 4.3 of the DEA details the methodology applied to determine what, if any, impacts may occur due to plover fencing on beaches. While attendance at State beaches may have increased, it is not necessarily the case the plover fencing did not impact visitation. Data are not available, for example, to estimate whether visitation would have increased at an even greater rate in the absence of plover protections. Ideally, visitation rates at individual beaches would be compared before and after plover conservation efforts were undertaken. Such data were not available for use in the DEA. Therefore, absent empirical evidence of the change in visitation levels, the assumption that fewer recreators visit plover beaches than would have absent fencing is an appropriate means to bound the potential impact of conservation efforts. This approach was peer reviewed and determined to be reasonable.

81. *Comment:* Many comments disagree with that the assumption in the DEA that all the foregone acres of beach set aside for plover breeding could be used for recreation. In particular, commenters state that the assumption that recreation is completely eliminated from entire stretches of beach where symbolic fences or enclosures are erected overestimates impacts. They state that most access restrictions occur on the foredune, away from the wave slope (or wet sand) where most recreation (e.g., walking, riding, driving) occurs. In addition, for a number of the beaches, the fenced areas are not amenable to recreation for much of the plover breeding season. One commenter asserts that this is not considered in the DEA, which assumes year round usage of all acreage designated.

*Our Response:* Paragraphs 148–149 of the DEA present the anecdotal evidence provided in the literature and by interest groups and beach managers that beach visitors may or may not be affected by plover conservation efforts depending on, for example, their primary purpose of visitation and

location of fencing. In fact, some visitors may consider their beach visit enhanced due to the possibility of plover viewing, while others may consider it degraded due to restricted access at particular stretches of beach. Because of the uncertainty surrounding the potential reactions of beach visitors to plover-related access restrictions, the DEA employs two alternative methods to estimate the potential magnitude as discussed in Section 4.3. The first method, scenario 1, used in the DEA assumes that as a result of plover restrictions, recreators take fewer trips to the beach. The availability of substitutes is considered. For beaches at which less than 10 percent of the beach length restricts recreation, this analysis assumes that recreators may visit substitute sites of the beach resulting in negligible welfare losses. The second method used in the DEA, scenario 2, assumes that rather than losing beach trips, recreators visit their first choice sites but have a diminished experience as a result of plover restrictions. This second approach may overstate losses at beaches that are sparsely visited and therefore are not likely to experience significant congestion as a result of fencing. This scenario, however, does not account for the losses to recreators who choose to visit a less-preferred beach or who make fewer trips.

82. *Comment:* Multiple commenters assert that the methodology used to estimate lost recreational opportunities in the DEA is flawed. One commenter noted that the assumption that all beach users get less enjoyment from short stretches of beach, specifically that pedestrians and equestrians lose \$1.42 in daily net economic value for every one mile reduction in beach length, means that everyone gets less pleasure from visiting shorter beaches, such as College Cove, than longer beaches, such as Mad River.

*Our Response:* The DEA assumes that visitors hold the same value for each one mile stretch of beach at all beaches across the designation. Accordingly, if a stretch of beach is restricted, the value to the visitor of that stretch is lost. The DEA does not make inter-beach comparisons of value. That is, the lost value of a restricted area on a particular beach reduces the value of that same beach absent plover fencing. The total values of various beaches (for example, shorter to longer beaches) can not be compared using only the value per mile per person per day. Other variables factor into estimating the value the public places on a beach, for example, the availability of parking.

83. *Comment:* One commenter states that the claim in section 4.5.1 of the

DEA that 70 percent of total annual beach attendance occurs during plover nesting season is incorrect. The commenter offers that a more likely estimate is 20 to 25 percent as nesting season occurs five to six weeks before school is over for the summer and that peak beach attendance is in July and August. Another commenter stated that reliance on vehicle-counters and vehicle counts in parking lots can overstate visitors.

*Our Response:* As described in the proposed rule, the DEA considers plover nesting season to be from early March to late September. Paragraph 158 describes that the estimate of 70 percent visitation during the nesting season is based on monthly visitation rates for beaches managed by California Department of Parks and Recreation with greater than ten plovers. In each instance, the DEA employs the most comprehensive data available in estimating number of visitors to the beach, in some cases visitor logs are kept by the beach managers, in other cases vehicle counts are considered the best indicator of visitation rates.

84. *Comment:* A comment highlights that the DEA states “Where data are not available for a beach area considered in the analysis, the closest similar site was identified and its attendance rate is used to calculate expected visitation.” The comment notes that this assumption is very problematic in California, where beach visitation varies significantly from beach to beach and it is inappropriate to assume that beaches near one another would have similar visitation.

*Our Response:* In the absence of specific visitation data for particular beaches, the analysis applies the visitation rates from the nearest beach with similar characteristics. The DEA acknowledges the limitations of this transfer and notes that better data are not currently available to improve upon these visitation estimates. The Service also notes that this type of data limitation only occurred in four subunits, only one of which experiences fencing.

85. *Comment:* One commenter offers that estimates of plover enclosure diameters of five to eight meters as assumed in the DEA far exceeds the actual size of the enclosures.

*Our Response:* As described in paragraph 165 of the DEA, the five to eight foot diameter design for enclosures assumed in the DEA is equal to that prescribed in the California Department of Parks and Recreation’s Plover Systemwide Management Guidelines.

86. *Comment:* Other commenters question the DEA’s assumption that the



value of a diminished beach trip is directly proportional to length of beach closed. The commenters note that the Lew and Larson study (Lew, Daniel K. and Douglas M. Larson, 2005, Valuing Recreation and Amenities at San Diego County Beaches, Coastal Management, 33:71–86) from which this information was obtained also offers the following information cited in the DEA “the coefficient on the length variables indicate utility increases with the length of the beach at a decreasing rate. In fact, the Lew and Larson paper provides the coefficients, which show that while beach length is positive, beach length squared is negative, making apparent that there is a non-linear and diminishing effect of additional beach length. Thus, the last few linear yards or miles of beach have less effect on visitation and value than the first linear years or miles of beach.” The commenters therefore state that the DEA should incorporate this information or estimate elasticity of demand for recreation at the beaches to account for this affect.

*Our Response:* Paragraph 196 of the DEA describes the method applied to estimate value per mile of beach. The DEA applies the mean beach length from the peer-reviewed California-based study (Lew and Larson, 2005) of 2.06 miles, and divides it by the implicit price estimated from the study’s utility function. This results in a value of \$1.42 per beach mile per visitor on average. While Lew and Larson do use a functional form (quadratic) that allows them to estimate a non-constant marginal impact of beach length, strictly applying this functional form to individual beaches creates complications. For example, the Lew and Larson results imply that for all beaches longer than 8.4 miles, additional length will decrease the value of a visit. Equivalently, the results imply that partial closures may lead to benefits for visitors at such beaches. In order to apply the results of this study to our sample of beaches, the DEA derives and applies a single average value from the Lew and Larson study. Further, plover fencing may occur anywhere along the beach (e.g., at the beginning, end, at multiple locations, or at access points) and therefore result in fragmented beach access; that is, access restrictions for plover conservation are not necessarily continuous. The DEA does not assume that there is a negative value to incremental reductions in beach length for sites longer than 8.4 miles but instead assumes visitors value incremental length on longer beaches as much as on shorter (below 8.4 miles)

beaches. This method of applying the Lew and Larson study to estimate decreased value of beaches due to plover restrictions was determined by peer reviewers to be reasonable with the data available.

87. *Comment:* Several comments state that the assumption that visitors are distributed evenly along the entire length of the beach is false. Specifically, the California Department of Parks and Recreation comments that beach users at most non-motorized beaches areas tend to spend the majority of their time within a quarter of a mile from the access points or along the wet sand near the waters edge.

*Our Response:* Exhibit 4–32 the DEA acknowledges that, to the extent visitors congregate around access points, this analysis overstates the lost recreation value associated with plover conservation efforts. However, quantified estimates of the distribution of visitors away from access points are not available for California. In addition, the estimation of the specific visitor densities in the vicinity of the plover fencing or enclosures is complicated by the fact that the location plover fencing may change over time depending on the location of nest sites.

88. *Comment:* One comment on the DEA states that the \$30 per person per day value of lost recreation applied in the DEA is drawn from a study of beach use in the San Diego area and may not apply to rural areas such as Humboldt County. Similarly, another comment states the use of Southern California value estimates for other regions that are vastly different in populace and land uses overstates recreation impacts in the other regions.

*Our Response:* Ideally, specific per person per day values for lost recreation would be applied for each individual beach in the analysis. During the development of the DEA, however, these data were not determined to be available for each beach in California, Oregon, and Washington. Available studies that estimate value of beaches for recreation are based on beaches in Santa Monica and Orange Counties, California and the east coast (e.g. Florida and New Jersey). Values reported in these other studies of beach recreation, range from approximately \$12 to \$62. The DEA estimate of \$30 per person per day for a beach trip falls well within this range. Based on location, date, and study characteristics, the Lew and Larson (2005) value of general beach recreation on San Diego beaches was determined to be the most appropriate for the DEA. Peer reviewers of the DEA agreed that this value was

reasonable considering available information.

89. *Comment:* Multiple comments on the DEA assert that the value of the birding, botanizing, and general nature-related enjoyment should be included. The comments provide numerous specific examples of essential habitat units where birders travel specifically to see plovers and where plover management results in a more aesthetically pleasing area. The Service’s 2001 National Survey of Fishing, Hunting, and Wildlife Associated Recreation estimates 1.3 million individuals visited the California ocean side to engage in shorebird viewing accounting for over 22 million non-residential (i.e., away from home) bird observation days in California. This study highlights that in 2001, expenditures in California by all wildlife viewers amounted to an estimated \$2.1 billion, and that shorebird viewing constitutes an important component of all wildlife viewing in California. Finally, a comment states that the preservation of open space for the plover draws local, regional, and international visitors that contribute to the local economy.

*Our Response:* The DEA acknowledges the potential for benefits to the birding community of plover conservation efforts and notes that, to the extent that birding, botanizing, and general nature-related enjoyment are increased by the plover conservation efforts, the DEA overstates the economic impact of these conservation efforts. Evidence exists that some percentage of visitors engage in birding activities. The Oregon Shores Recreational Use Study estimates that 0.2 percent of visitors to all beaches across the State identified birding as the primary reason for their trip. Data are not available, however, to estimate the number of visitors that may engage specifically in plover-viewing. Further, the National Survey described above evidences the importance of wildlife-viewing in the entire State, not that specifically related to plover habitat. The Survey also does not offer sufficient information to determine how many viewers visit the plover beaches, and further, how their decision to visit is related to the plover conservation efforts quantifies in the DEA.

90. *Comment:* One comment highlights the availability of literature valuing wildlife-viewing in California (Cooper and Loomis, 1991, “The Economics and Management of Water and Drainage,” Agriculture, Dinar and Zilberman, eds.). These data could be used to value the benefits that seeing additional plovers might provide to beach visitors.



*Our Response:* The study cited in the comment offers a metric to correlate bird populations with increased value for a birding trip. While the DEA acknowledges the potential for improved conditions for bird-watching, as mentioned above, data are lacking in the numbers of visitors to the plover beaches that participate in bird-viewing. In addition, data on the number of birds typically seen on a single trip at each site absent plover conservation activities, and the increase in plovers seen as a result of conservation activities, is unavailable. It is therefore not clear how these value estimates in the cited study may be applied to this analysis.

91. *Comment:* Another comment states that the DEA uses the average value per trip of \$30 from the Lew and Larson (2005) article. However, page 4–21, footnote 118 of the DEA notes that when substitute beach opportunities are taken into account, the losses from completely closing a single beach is between \$0 and \$1 per person trip; for example, for Silver Strand State Beach the loss per trip is \$0.09. As stated in the footnote, the losses estimated recognizing the availability of substitutes can lower the recreational losses by an order of magnitude. The comment further expresses that the Lew and Larson research could be used somehow to estimate the lost value from closing several beaches as an upper bound on partial closures of beaches due to critical habitat.

*Our Response:* As noted in the Lew and Larson study, the values referred to in the comment, \$0 to \$1, are per-trip economic values of closing individual beaches out of choice set of 31 beaches in San Diego County. The per-trip value is multiplied by all the individuals in the county who ever visit any beach, regardless of whether their first choice site is the beach that closes. This aggregate value represents the welfare loss of closing a single beach. Transferring this value to the DEA requires estimating the total number of people who visit any beaches (public and private) within California, Oregon, and Washington, and not simply the plover beaches addressed in the DEA. In other words, value losses would occur to all visitors for which a plover beach is within his or her choice set. Estimating the number of beach users cannot be accomplished simply by looking at beach visitation data, as single users may visit the beach multiple times. In addition, data are not available at the State level to group beaches into choice sets, and to understand the total number of visitors to each set. These issues present

significant limitations to using these data to estimate impacts of plover restrictions. In addition, although the per trip value loss is less than the value used in the DEA, the number of beach users by which this value is multiplied is likely more than the number of visitors to plover beaches. Therefore, a method that applies the \$0 to \$1 values may not result in a significantly lower estimate of impact.

92. *Comment:* One party comments that the DEA assumption that the entire length of the critical habitat unit is closed where information on the amount of fencing is not available is not appropriate. The comment offers that the DEA should use instead estimate an average fencing length to total length of the critical habitat unit to make an informed estimate.

*Our Response:* In the absence of information regarding length of fencing, the DEA assumes the entire length of critical habitat publicly owned or managed is fenced in four units. Estimating an average ratio of fenced to total beach is complicated by the extreme variation in this value across beaches. The ratio varies from 0.01 percent to 100 percent across the proposed designation. In the case that the fenced area is smaller than the proposed habitat in these four units, impacts to recreation are likely overestimated. It is not clear, however, that the methodology suggested by the commenter would yield more accurate results than that employed in the DEA.

93. *Comment:* A commenter states that the seventy mile portion of the coast between Gaviota and Guadalupe has only four coastal access points; those at Surf Beach and Ocean Beach provide the nearest coastal access for the 65,000 residents of Lompoc Valley. The comment further states that both beaches have been affected by the beach closures due to the designation of critical habitat for the plover. For Lompoc Valley residents, coastal access alternatives are almost an hour drive.

*Our Response:* This comment provides anecdotal evidence supporting the assumption applied in the DEA that beach users may be impacted by plover conservation efforts and that limited substitutes may exist in particular areas.

94. *Comment:* A commenter states that the recreational impacts to CA–17A and CA–17B are underestimated in the DEA and that the total economic loss in beach use at these sites is \$627,908 per season (2002\$). The comment questions the DEA conclusion that five other stretches of the California coast experience greater economic losses despite the fact that they have other beach access alternatives. The

commenter requests that the DEA consider both the number of users and the availability of alternative beach access locations.

*Our Response:* The data used to calculate the number of visitors impacted at these sites were provided by Santa Barbara County and Surf Ocean Beach Commission. Because data are available for the period after plover restrictions were put in place, based on the length of beach previously available, the analysis assumes visitation may have been four times higher without plover fencing. As described in Section 4.3, the DEA employs two distinct scenarios to estimated the potential magnitude of loss associated with reduced recreational opportunities. Scenario 1 assumes that as a result of plover restrictions, recreators take fewer trips to the beach and assigns a value obtained from the published economics literature to those lost beach trips. Under this scenario the DEA estimates an annualized loss of \$5.14 million for subunits CA–17A and CA–17B. Scenario 2 assumes that rather than losing beach trips, recreators still visit their first choice sites but have a diminished experience as a result of plover-related access restrictions. According to this scenario, an annualized loss of \$120,000 is forecast in subunits CA–17A and CA–17B. The estimate provided by Santa Barbara County falls within the range of potential impacts as estimated in the DEA.

95. *Comment:* One commenter stated that the DEA should not estimate losses to recreation on beaches at which access is restricted for national security reasons, such as Vandenburg Air Force Base, or on beaches for which the purpose of public acquisition is for habitat preservation, such as Coal Oil Point Reserve and Nipomo Dune National Wildlife Refuge.

*Our Response:* The DEA estimates losses to recreation at Vandenburg Air Force Base as stretches of beach that were previously open to the public were closed due to the presence of the plover and not for national security reasons (see Section 4). Similarly, stretches of beach that were open to the public at Coal Oil Point Reserve have been fenced for the plover. The economic analysis assumes that these access restrictions for the purpose of plover conservation may impact the visitors to these beaches and quantifies the impact. The DEA does not, however, estimate any impact to recreation at Nipomo Dune National Wildlife Refuge as access to this site restricts access to the public for reasons unrelated to the plover.



96. *Comment:* One comment expresses concern that the DEA applies an estimate of the value recreational vehicle use from a study based in Utah and North Carolina, while the plover habitat is within California, Oregon, and Washington.

*Our Response:* Ideally, the DEA would employ a California-based study to determine the value of beach vehicle recreation. However, no such study was identified during the development of the DEA. The estimates used were contemplated by peer reviewers on the DEA and determined to be the most reasonable given currently available information.

97. *Comment:* One comment states that the DEA does not take into account the fact that Oceano Dunes State Vehicular Recreation Area (ODSVRA) is the only beach in California that legally permits the general public to drive on the beach and camp with recreational vehicles (RVs) directly on the beach. The comment further states that the DEA does not account for the value visitors place on restrictions to the unique beach camping opportunities at ODSVRA. Given the high visitation rate, as well as the location of camping restrictions, plover conservation has substantially reduced the value of the camping experience by creating a congested camping environment.

*Our Response:* The DEA assumes that no substitute sites for this beach exist and accordingly estimates the value of restricted trips by assuming these visits are completely lost. Further, the DEA values pedestrian trips to this site at \$30 per day and OHV trips to this site at \$54 per day, consistent with the other sites in the analysis and relying on data provided by ODSVRA on the relative proportions of visitor types. The increment by which the opportunity for camping may increase the value that recreators hold for this site is unknown, and no additional information about this value was provided in public comment. If the value of a camping trip to this site is greater than \$30 per day, the DEA may underestimate impacts to pedestrian users who camp at ODSVRA. Similarly, if the value of a camping trip at this unique site exceeds \$54 per day, the DEA may understate impacts to OHV users who camp at ODSVRA.

98. *Comment:* One commenter states that visitors to ODSVRA tend not to be local residents and that applying the studies of expenditures of beach users for southern California, where many of the visitors are local, underestimates the impact to the regional economy. The comment further states that the DEA appears to underestimate attendance at ODSVRA. Page 4–45 of the DEA

indicates beach attendance to be constant at 1,486,158 visitors (2002 data) through 2025. The DEA does not take into account increasing visitation. Also, the comment states that the DEA does not provide information on how the annual visits per mile (200,812) during the breeding season was calculated.

*Our Response:* Based on a study published by the State of California's Department of Parks and Recreation in 1993 and provided in public comment, ODSVRA users spend more per trip than assumed in the DEA. In response to this comment, the regional impact modeling tool, IMPLAN, employed in the DEA was re-run to determine impacts as a result of recreation restrictions at ODSVRA for San Luis Obispo County, California assuming each lost trip results in a decrease in local expenditures of \$97, as opposed to the \$51 originally assumed in the DEA. This value is applied to a reduction in 209,164 trips in an average year from 2005 to 2025 resulting in an estimated impact of \$30.1 million. This loss represents 0.25 percent of the annual baseline economy of San Luis Obispo County. This loss in trips is also estimated to impact 597 jobs in the County, or 0.45 percent of the annual baseline jobs.

To estimate visitation, the DEA used attendance data provided for ODSVRA by California State Parks for years 1997 to 2004. The values presented on page 4–45 represent average annual attendance during the nesting season. Attendance in 2004 was estimated to be 1,763,948. Further, as described in paragraph 159, the annual visitor estimates are assumed to increase two percent annually and are not assumed to be constant across future years.

To estimate the average annual number of visitors per mile at ODSVRA, the DEA assumes that 6.4 miles of beach are available for recreation in Unit CA–16. The average annual visitation to the entire area is estimated to be 1.8 million and the DEA assumes that 70 percent of annual visitation occurs during the plover breeding season. The estimate of visitors per mile during the breeding season is calculated by dividing the annual number of visitors by the length of beach and multiplying it by the percent of annual visitation occurring during the breeding season.

99. *Comment:* One commenter states that the DEA relies on the Second Administrative Draft Habitat Conservation Plan for the California Department of Parks and Recreation San Luis Obispo Coast District and Oceano Dunes State Vehicular Recreation Area (ODSVRA) to describe plover

conservation efforts on ODSVRA. This draft incorrectly states that exclosures occur only as far as pole seven on the beach when in fact they extend further to pole six.

*Our Response:* The DEA relies on the Draft Habitat Conservation Plan to determine the extent of plover fencing at ODSVRA. To the extent that this plan underestimates the length of the restricted area, the DEA may underestimate impacts. The distance between poles six and seven is one half mile.

100. *Comment:* One commenter offers that the DEA should have based its estimate of recreational impacts in OR–9 on the recreation losses estimated as a result of the New Carissa tanker spill in the pre-assessment report. The use of the New Carissa value is valid, because the report estimates losses that recreationists were awarded in a court settlement.

*Our Response:* The value per trip applied in the New Carissa impact study is \$14.39 per person per trip compared to \$30 assumed in the DEA. However, the DEA estimates a lesser number of visitors experiencing diminished recreation value. For example, the data applied in the DEA estimate 71 visitors to OR–9 in 1999 compared to 18,400 visitors considered in the New Carissa study. The visitor count data used in the New Carissa report are 1999 vehicle count data taken at the BLM boat ramp north of OR–9. Based on information provided by BLM personnel, this visitor data is not an accurate count of visitor use in the critical habitat area. The BLM anticipates that most of the visitors counted in the New Carissa study use the boat ramp and do not access the plover area. To get to the plover area, a visitor would need a four wheeled drive vehicle to access the beach via the South Dike Road. No vehicle count data is available for the South Dike Road. The DEA therefore considers the best available visitor use data for OR–9 to be the Oregon Shore Recreational Use Study that specifically surveyed the beach contained within OR–9.

101. *Comment:* One commenter states that overestimation of impacts is inherent in the following quote from the text box on page 4–5 of the DEA: “\* \* \* assuming half of the beach is inaccessible as a result of plover conservation efforts approximately 9,200 trips would be lost annually \* \* \*”. However, it is unclear what proportion of the visitors using this parking lot are precluded from recreating in these areas proposed for designation as a result of plover conservation efforts.” The commenter states that it seems there should be no



loss in visitation at this BLM site associated with the plover critical habitat unit.

*Our Response:* The text box on page 4–5 presents information provided by the County Commissioner of Coos Bay, Oregon in contrast to that provided in the DEA. This information is included for comparison but not quantified in the total economic impacts described in the DEA.

102. *Comment:* Two commenters disagree with the DEA's assumption that saltwater fishing trips involve beach vehicle use.

*Our Response:* Information provided by managers and stakeholders during the development of the DEA indicated that vehicles are used to facilitate surf fishing and that surf fishing may therefore be reduced by restrictions on driving. Peer review of the DEA also determined this assumption was reasonable.

103. *Comment:* One comment provided on the DEA states that the regional economic impact model overstates lost regional spending resulting from restricted beach visitation. The commenters opine that spending would simply be redistributed toward substitute goods.

*Our Response:* Section 4.6 of the DEA discusses this limitation of the regional economic impact model, IMPLAN. This model does not assume that spending would occur on substitute goods within the region. To the extent that visitors purchase substitute goods and services in the region, the DEA may overestimate regional economic impacts. The regional economic impacts as estimated, however, are considered to represent a reasonable upper bound of impacts to the local economic as a result of restricting recreational visitation.

104. *Comment:* One comment expressed concern about the sources of data used to estimate reductions in recreational use. The commenters were unable to verify data assumed to be provided by Humboldt County Public Works and BLM's Arcata Office.

*Our Response:* Beach visitation data were not provided by Humboldt County Public Works or BLM's Arcata Office for the DEA. These data were provided by Humboldt County Parks Department. BLM's Arcata office provided information on OHV restrictions, but not visitor attendance.

105. *Comment:* Two comments were provided stating that the number of visitors impacted at Silver Strand State Beach is overstated in the DEA. The number of vehicles and campers counted in 2004 was 97,949.

*Our Response:* Monthly attendance data for Silver Strand State Beach

provided by California Department of Parks and Recreation from 2001 to 2005 are used in the DEA. According to these data 326,746 visitors were recorded in 2004. This source was determined to provide the best available data.

106. *Comment:* Two commenters noted that reductions in some types of recreation, such as off-highway vehicle (OHV), or equestrian use, may result in increases in beach trip value for other user groups.

*Our Response:* Exhibit 4–32 of the DEA describes that, to the extent that plover-related vehicle restrictions increases the value of a beach trip for other recreational user groups, the analysis overstates economic impacts to recreational users. Data were not identified, however, that describe the relationship of beach vehicle use and value to the pedestrian or equestrian recreators.

107. *Comment:* One comment asserts that the regional economic impact analysis in the DEA does not take into account the impact to visitors with complex mechanical needs stemming from the use of Recreational Vehicles (RVs), OHVs, and dune buggies.

*Our Response:* As discussed above, in response to comments on the DEA, the IMPLAN regional modeling tool was used to determine regional impacts of restrictions to vehicle use at ODSVRA for San Luis Obispo County, California. Following comment, this revised IMPLAN analysis assumes a greater decrease in local expenditures per trip than used in the DEA based on a study published by the State of California's Department of Parks and Recreation in 1993 on ODSVRA users. Impacts to vehicle recreation-related activities, such as gas and equipment were considered in this analysis, which estimated an of impact of \$30.1 million to the regional economy.

108. *Comment:* One commenter expressed concern that while dog-walking has occurred on Sands Beach for decades, recently, the California Coastal Commission has banned dogs from the beach as a result of a land swap deal to protect a nearby bluff.

*Our Response:* Footnote 128 of the DEA discusses the value that beach visitors may have for dog-walking on plover beaches. This comment provides anecdotal evidence that some visitors may experience diminished trip value in the case that this activity is restricted for the purposes of plover conservation. The incremental value that the opportunity for dog-walking may have on the value of a beach trip, however, is unclear.

109. *Comment:* One commenter states that the DEA does not report that

approximately 15 acres of CA–18 are owned and managed by the City. Public uses on this 15 acres include fishing, trails, scuba diving, swimming, vista points, windsurfing, and wildlife viewing. Excluding the impact to these recreational uses underestimates the economic impact of plover conservation in this unit. The City of Goleta is in the process of implementing a long-term management plan, covering these 15 acres, that includes plover protection provisions.

*Our Response:* This comment provides new information of recreation taking place on a City beach within the potential plover habitat in Unit CA–18. The DEA does not currently estimate impacts in this area. Additional information would be required on the number and type of visitors and on the potential plover management activities on this beach in order to estimate impacts. That visitors engage in dog walking evidences the positive value of this type of beach recreation, however this value has not explicitly been studied.

110. *Comment:* A commenter states the DEA does not recognize the impacts to recreational activities that occur within Unit CA–1, or the businesses that rely on those activities. The DEA does not recognize the historic use of the area by the general public for uses such as horseback riding, hiking, fishing, OHVs, birding, and camping. The use of the area is promoted as a public access point as part of the County Local Coastal Program, and the County maintains a parking facility at the west end of Kellogg Road to serve the general public.

*Our Response:* Based on this information, the DEA likely underestimates impacts to recreation in CA–1 of plover conservation. More information is needed on the extent of recreational activity and of plover conservation efforts in this area, however, before economic impacts may be estimated.

111. *Comment:* One comment states that the DEA did not consider recreational impacts to Kellogg Beach in Unit CA–1.

*Our Response:* This comment provided did not indicate that plover management would occur at Kellogg Beach that would impact recreation. Further, conversation with Del Norte County did not indicate that plover fencing occurs in this area. To the extent that plover management does occur at Kellogg Beach in the future, the DEA may underestimate impacts to CA–1.

112. *Comment:* One comment states that the DEA underestimates the number of recreational trips lost at Clam Beach, at 55 trips per year, and therefore



underestimates the regional impact of these lost trips.

*Our Response:* As described in Exhibit 4–30 of the DEA, an average annual loss of 1,109 trips is estimated for Unit CA–3A at Clam Beach. The commenter appears to have assumed that the 1,109 trips lost were estimated over 25 years, when in fact the estimate is annual.

113. *Comment:* According to one commenter, the DEA should include any economic impact on commercial beach fishing.

*Our Response:* In developing the DEA, no information was identified concerning any commercial beach fishing operations within the proposed critical habitat designation. To the extent that commercial beach fishing operations does occur, impacts to these beach users are not incorporated. The extent to which commercial fishers were included in the visitor counts, impacts to these parties were included in the DEA. However, they were assigned a recreational fishing value, which may differ from values of trips to commercial fishers.

114. *Comment:* One comment asserts that the DEA underestimates the regional economic impact of plover conservation efforts. The commenter states that his/her Clam Beach horseback riding business was impacted, harassed, and eventually closed due to plover listing, plover advocates, and agency threats and that \$20,000 per year is lost to the community by this business being closed.

*Our Response:* The DEA considers the impact of plover conservation efforts on small recreation-related businesses in this region in Section 4.6.

115. *Comment:* Multiple commenters state that the DEA did not consider potential reductions in property value due to plover-related land use restrictions. For example, according to one comment, property owners within critical habitat will bear “stigma impacts,” including “changes to private property values associated with public attitudes about the limits and costs of implementing a project in critical habitat.” In contrast, other commenters assert that the DEA suggestion that restricting beach access can only have a negative effect on property values is incorrect and suggest that restricting beach access could have a positive offsetting impact on certain types of property value, particularly beach residents, if beach congestion is reduced. The DEA does not include potential benefits from restricted beach access, or cite relevant hedonic price literature quantifying the relationship

between congestion externalities and housing prices.

*Our Response:* Section 1.2.3 of the DEA describes the potential for stigma impacts. More specifically, Section 5.1 of the DEA discusses the potential for plover conservation efforts to affect property values. While property value research demonstrates that proximity and access to beaches may increase the value of a property, research was not identified that correlates the level of beach access to property value. Plover conservation efforts are not anticipated to completely preclude access to beaches, and no data are available to estimate potential percentage decrease in property value if beach access is restricted but not precluded. Section 4.3.2 of the DEA discusses the effect of beach congestion on value of a beach trip, but no literature was identified in the development of the DEA correlating beach congestions and housing price.

116. *Comment:* A comment provided states that while the DEA acknowledges the three development nodes on the Sand City Cost, the Monterey Bay Shores’, MacDonald, and Sterling sites, it only considers impacts to the Monterey Bay Shores’ site.

*Our Response:* Section 5.3.3 of the DEA describes the impacts of implementing plover conservation efforts in the implementation of the Sand City development project. The DEA acknowledges the three sites that comprise this development project: The McDonald Site, Sterling Site, and Lone Star Site (also referred to as Monterey Bay Shores). The DEA, however, incorrectly refers to the three sites collectively as the “Monterey Shores development project.” The description of plover conservation efforts to minimize impacts is from the draft Habitat Conservation Plan (HCP) for the Monterey Bay Shores Project site specifically. The DEA assumes that similar conservation efforts may be required at all three sites. Importantly, however, the economic impacts as quantified in the DEA were obtained from personal communication with the attorney from Sand City and include impacts to the entire Sand City development project.

117. *Comment:* Two commenters assert that the DEA should not include economic impacts to Sand City associated with HCP development. Commenters offers that the California Coastal Commission’s (CCC) denial of a development permit for this project was based on a number of reasons involving the project’s failure to meet legal standards under California’s Coastal Act and was not predicated solely on the presence of plovers on the property.

Comment from the CCC asserts that they did not permit the project primarily due to a water availability issue, and not because of the plover.

*Our Response:* Section 5.3.3 of the DEA acknowledges that initial project plans were not permitted for multiple reasons and that it is unclear to what extent the re-planning efforts were driven by the plover. The DEA further acknowledges that consideration of multiple factors influenced the currently proposed mitigation measures associated with the revised plan for development of Sand City, for example the purchase of private lots for open space and development. Particular conservation efforts described such as hiring of full-time plover monitors, however, are clearly related to the plover. The DEA isolates conservation efforts associated with the development that specifically benefit the plover and its habitat for inclusion in the estimate of impacts to Sand City. Of note, Unit 12C of the proposed critical habitat, which contains this proposed development site, is excluded from final critical habitat.

118. *Comment:* One commenter states that the DEA’s assumption that there will be no development impacts on the Oxfoot Property (Unit CA–7) is unreasonable. The commenter asserts that the Dillon Beach site will likely be developed in some fashion during the next 20 years and that the lack of a current formal development application is not a basis for concluding that none will occur. This comment further states that when development is proposed, the permitting authority will impose land use and beach access restrictions related to plover critical habitat. Because beach access has a positive effect on property value, the commenter states that restricting beach access to future development will have a negative effect on property value.

*Our Response:* Section 5.3.4 of the DEA acknowledges the development potential of Dillon Beach within Unit CA–7. Communication with the Marin County Planning commission indicated that development projects in the area in the past have not been influenced by the plover or habitat. During the development of the DEA, the commenter provided plans for the proposed Lawson Family Dillon Beach Resort, which were developed in 1995–1996 and included a memorandum on environmental constraints associated with the project which was reviewed by the County in preparing the Dillon Beach Community Plan. This memorandum highlighted impacts to special status species within the vicinity of the proposed project site. The plover



is not included in this list and the memorandum concludes that other wildlife species are not found at the site. It is therefore considered unlikely that plover conservation efforts would be a condition of permitting for this or similar development projects within the Dillon Beach area.

119. *Comment:* One commenter states that, "there will be future costs for administration of habitat conservation plans for the private lands within Area CA-1," that are not captured in the DEA. For example, administrative costs of section 7 consultation associated with breaching of Lake Earl are not included.

*Our Response:* As described in Section 5.3.4, Unit CA-1 is within Del Norte County, California and is 87 percent private lands. While attempts to develop the area have occurred, it has not been permitted for various reasons unrelated to the plover. Primarily the water table is very high in this area. Breaching of the adjacent lake would need to occur more often in order to make development possible, but the lake breaching presents an issue for the endangered tidewater goby. (Note that breaching of the lake could be beneficial to the plover.) No information was uncovered in the development of the DEA indicating future habitat conservation plans for the plover in this unit. Past consultation in 2003 on the lake breaching did not result in any conservation efforts for the plover. The consultation did, however, consider impacts of the project to the plover and administrative costs are therefore captured. In the case that consultation were to occur for the similar breaching efforts in the future, the DEA underestimates the administrative costs of considering the plover, although no plover-related conservation efforts are expected to result consistent with previous consultations on the same project.

120. *Comment:* According to one comment, the DEA does not include the economic loss of potential reduced campground development in Unit CA-3A, Clam Beach/Little River.

*Our Response:* As detailed in Section 5.3.3 of the DEA, Humboldt County Public Works estimates that in the case that plover conservation efforts limit the planned expansion of the existing public campgrounds in Humboldt County, the County could lose up to \$30,000 per year in unrealized revenue. This impact is included in the DEA.

121. *Comment:* According to a comment, the DEA underestimates management costs for ODSVRA. The DEA estimates that from 1993 to 2000, California Department of Parks and Recreation spent approximately

\$200,000 annually on plover management, almost all of which was spent at Oceano Dunes. Those costs increased to \$750,000 per year from 2001 to 2004. Future management costs at ODSVRA are expected to exceed \$750,000 per year going forward. No mention is made, however, of the recent settlement of litigation between California Department of Parks and Recreation and Sierra Club, in which State Parks committed to spending in excess of \$500,000 in plover conservation and monitoring efforts.

*Our Response:* Paragraph 100 of the DEA describes the expected expenditures for plover management by California Department of Parks and Recreation as a result of the litigation referenced in this comment. The future management costs of \$750,000 per year referenced above, and incorporated in the DEA's impact estimate, includes the \$500,000 for plover management resulting from the consent decree between California Department of Parks and Recreation and the Sierra Club.

122. *Comment:* One comment suggests the DEA underestimates management costs at California Department of Parks and Recreation sites by not using the average cost to protect a plover nest at ODSVRA of \$5,700 per nest. The DEA instead uses an estimate of \$750 per nest for other sites.

*Our Response:* Paragraphs 99 and 100 of the DEA discuss California Department of Parks and Recreation per nest management costs. As highlighted elsewhere in this comment, ODSVRA is unique when compared to all other California Department of Parks and Recreation sites, in that it provides large-scale vehicular recreation and camping on the dunes. California Department of Parks and Recreation provided an estimate of future management costs of \$300,000 annually for all sites other than ODSVRA and \$750,000 annually for ODSVRA. These estimates were divided by the number of nests present to determine a per nest cost. The per nest cost is used in the DEA to estimate management expenditures at each unit as expenditures are not tracked by California Department of Parks and Recreation according to individual unit. It is therefore not appropriate to apply per nest management costs estimated for ODSVRA to other California Department of Parks and Recreation sites.

123. *Comment:* One commenter asserts that the DEA should consider cost savings resulting from converting from daily, weekly, or other raking, to less frequent raking schemes.

*Our Response:* The mechanical beach cleaning restrictions estimated in Section 4.5.2 of the DEA occur entirely within Los Angeles County. The County indicated that the Los Angeles County Fire Department—Lifeguard Division requires that the tide line be raked daily to create an even surface for safe emergency vehicular response and for general safety patrol. In addition, if mechanized beach cleaning were reduced the county would have to hire additional staff to manually clean the required beaches. Therefore, no cost savings are anticipated associated with decreasing the frequency of beach raking in Los Angeles County.

124. *Comment:* One commenter states that cost estimates for management and monitoring appear to have been exaggerated in the DEA by including staff and contractor activities not specifically related to the presence or potential presence of plovers. For example, Silver Strand State Beach has limited beach raking, and Border Field State Park has no beach raking related to plover.

*Our Response:* The DEA agrees with this comment and does not estimate any impacts of reduced beach raking for either of these sites.

125. *Comment:* One comment asserts that cost estimates for management and monitoring are overstated at Border Field State Park. Monitoring, management, and fencing at this park are focused on the California least tern and no areas are specifically closed due to the presence of plover.

*Our Response:* Management costs estimated in Section 3 for this assume that California State Parks will spend \$750 per nest for plover management, which includes construction of exclosures and symbolic fencing, dog prohibitions, and predator controls. These efforts have been undertaken at other California State Parks and are therefore assumed to be potentially relevant at other State Parks that support the plover in the future. As described in Section 4 of the DEA does not estimate any recreational losses in this unit.

126. *Comment:* According to one commenter, impacts calculated for Unit CA-12A, Jetty Road to Aptos are based on the future use of exclosures. While it is true exclosures have been used in the past, they may not necessarily be in the future. For example, in the 2005 breeding season no exclosures were used on this beach section.

*Our Response:* The DEA assumes past management efforts may continue into the future in the case that the area is designated as critical habitat. To the extent that plover fencing or exclosures



are not constructed, the DEA likely overestimates the impacts of plover conservation efforts at this site. Unit 12A has been excluded from final critical habitat designation.

127. *Comment:* One commenter states that the DEA does not include any economic impacts of predator control.

*Our Response:* Sections 3.1 and 3.2 of the DEA discuss and quantify management costs, including predator control.

128. *Comment:* A comment provided on the DEA requests that the range in gravel mining costs related to plover monitoring be explained.

*Our Response:* Paragraph 335 of the DEA summarizes impacts to gravel mining. Gravel mining costs are expected to range from \$5,000 to \$50,000 for plover monitoring. The range is great as costs depend on whether and where the plovers are located in the area. Costs may increase, for example, if plovers are in the proposed extraction area.

129. *Comment:* One comment states that the DEA does not properly distinguish property ownership and cost associated with North Island North (CA-27A) and North Island South (CA-27B). North Island North is Naval Base Coronado. The Department of Defense (DOD) owns land in both units but are listed in Exhibit 3-4 as private. Further, North Island South costs are included as DOD costs but the property is primarily owned and managed by City of Coronado.

*Our Response:* The Proposed Rule states that both subunits are located entirely on land owned by the Department of Defense. Exhibit 3-4 of the DEA however, incorrectly identifies the land manager as private. The DEA does not estimate costs other than military for these two subunits as described in Section 6.2.2. Therefore, this correction is purely descriptive and does not affect impact estimates.

130. *Comment:* One commenter states that the DEA should include costs attributable to section 7 consultations, law enforcement, or additional expenses to public works related to plover conservation efforts.

*Our Response:* Section 3.3 of the DEA quantifies the administrative costs of section 7 consultation; Sections 3.1 and 3.2 quantify and discuss management costs, including law enforcement costs where appropriate. Further, impacts to public works project, such as the Humboldt County camp grounds, are considered in the DEA.

131. *Comment:* One commenter highlights that paragraph 18 of the DEA does not acknowledge that the HCP developed by the California State Parks

for Oceano Dunes is only a draft and includes several state park units in the San Luis Obispo County in addition to Oceano Dunes State Vehicular Recreation Area.

*Our Response:* Paragraph 100 acknowledges the draft HCP includes Estero Bluffs, Morro Strand State Beach, Montana Del Oro State Park, Pismo Dunes Natural Preserve, and Oceano Dunes State Vehicular Recreation Area.

### Summary of Changes From the Proposed Rule

In developing the final critical habitat designation for the Pacific Coast WSP, we reviewed public comments received on the proposed designation of critical habitat published December 17, 2004 (69 FR 75608), and the draft economic analysis published on August 16, 2005 (70 FR 48094); conducted further evaluation of lands proposed as critical habitat; refined our mapping methodologies; and excluded additional habitat from the final designation. Table 1, included in the "Critical Habitat Designation" section, outlines changes in acreages for each subunit where changes occurred between the proposed rule published on December 17, 2004 (69 FR 75608) and this final rule. In addition to clarifications in the text pertaining to units or subunits, we made changes to our proposed designation as follows:

(1) We mapped critical habitat more precisely by eliminating habitat areas of marginal quality that we do not expect to be used by Pacific Coast WSP. In certain locations, we determined that habitat had been degraded by extensive stands of non-native vegetation where beach managers are unable to plan dune system restoration due to shortages in funding or staff. In some instances, habitat may have also been degraded by overuse by humans, such as at OHV parks. As a result, the following critical habitat units had adjustments to their boundaries. The rationale for each adjustment is provided under the unit description. The affected critical habitat units are: CA 1, CA 15B, CA 16, and CA 19B.

(2) Several military areas were exempted from critical habitat designation due to their legally operative INRMPs. In addition, three National Wildlife Refuges were found to not meet the definition of critical habitat under section 3(5)(a) of the Act, and were removed from the designation. Finally, several areas were excluded from critical habitat under section 4(b)(2) of the Act. These areas were excluded either for national security reasons, operative habitat conservation plans, or because of the high economic

costs of critical habitat designation. For a complete description of these areas, please see the section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act.

(3) Although we attempted to remove as many areas of unsuitable habitat to Pacific Coast WSP as possible before publishing the proposed rule, we were not able to eliminate all of them. As a result, the final rule represents a more precise delineation of essential habitat containing one or more of the primary constituent elements. This correction resulted in a reduction in the total acreage published in the proposed rule. The affected critical habitat units are: CA 4D, and CA 19A, which contained areas in the proposed rule that were removed in the final designation. Some other designated units may also contain small portions which do not contain the primary constituent elements. Since it is not possible to remove each and every area that may be unsuitable Pacific Coast WSP habitat, even at the refined mapping scale used, the maps of the designation still may include areas that do not contain primary constituent elements. These areas lacking the primary constituent elements at time of the final rule's publication are not designated as critical habitat.

(4) Some mapping errors occurred in the proposed critical habitat rule for the Pacific Coast WSP, resulting in misnaming a proposed unit, an error in the depiction of unit boundaries, or in supplying the wrong UTM's (Universal Transverse Mercator) in a unit's legal description. The affected units corrected in this final rule are CA 4D, CA 12C, and CA 22. Refer to the specific unit description for corrections.

(5) The Unoccupied Areas Identified for Possible Inclusion presented in the proposed rule were determined not to be essential to the conservation of the species. Consequently, we are not designating those areas in Washington and Oregon that were not occupied at the time of listing in 1993. Those units are WA 1, OR 1A, OR 1B, OR 2, OR 4, OR 5A, OR 5B, OR 6, OR 8, OR 10B, OR 10C, OR 11, and OR 12.

(6) An error was made during development of the proposed rule concerning the occupancy of CA 11A at the time of listing. We mistakenly stated that CA 11A (Waddell Creek, Santa Cruz County, California) was unoccupied during 1993, resulting in us not formally proposing this subunit as critical habitat. We were referred to data in our possession at the time of listing indicating that breeding plovers were present at Waddell Creek in 1991, and again in 1995. No surveys were



conducted during the interim period. Consequently, we assume CA 11A was occupied at the time of listing, thereby fully meeting our designation criteria as critical habitat.

We present brief descriptions below of the changes that have been made to units from those proposed or considered under the proposed rule (69 FR 75608), and provide the rationale for their change. A more complete discussion of changes is provided in the unit descriptions for those units that are designated as critical habitat. The critical habitat features essential for the conservation of the Pacific Coast WSP are defined in the "Primary Constituent Elements" section below. All designated units are located within the range of the population, in the States of Washington, Oregon, and California. They are all considered currently occupied (with documented use by plovers since 2000), unless otherwise noted.

#### *Washington*

WA 4, Leadbetter Point/Gunpowder Sands, 832 ac (337 ha): The portion of the spit within the Willapa National Wildlife Refuge does not meet the definition of critical habitat in section 3(5)(a) of the Act, as it does not require special management. As a result, the unit size has decreased to its designated 832 acres (337 ha) from its proposed 1,069 acres (433 ha) with the exclusion of the Refuge.

#### *Oregon*

OR 8, (Subunits OR 8A and OR 8B): A number of changes to the Siltcoos River Spit (OR 8A) and Dunes Overlook/Tahkenitch Creek Spit (OR 8B) subunits were made in response to public comment. The changes reduced the total size of the unit from 563 to 535 acres and included: (1) Creating a new smaller unit (Siltcoos Breach) from the northern portion of OR 8A; (2) locating the northern boundary of OR 8A 0.6-miles north of the Siltcoos River; and (3) combining proposed subunits OR 8B with OR 8A. These modifications better reflect the current biological and management conditions at the site since they designate an important wintering area (the Siltcoos Breach), support the existing snowy plover management areas, and provide consistency with the *Draft Habitat Conservation Plan for the Western Snowy Plover* (Oregon Parks and Recreation Department 2004).

#### *California*

CA 1, Lake Earl, 57 ac (24 ha): The portion of the proposed unit extending north to Kellogg Road, has been dropped from the final critical habitat designation, reducing the size of the

unit from 91 acres (37 ha) to the designated 57 acres (24 ha). The narrow portion of the proposed unit that extended along the Pacific Shores housing development was eliminated from the final rule because of information received regarding the dense stands of non-native European beachgrass along an already narrow beach, the slope of the beachfront, and intensive use by OHVs. These combined factors make the northern portion of the proposed unit non-essential habitat. As a consequence, the unit's northern boundary has been moved to exclude the private property. The southern boundary has been changed to extend slightly to the south onto State Park property.

CA 4D, Eel River Gravel Bars, 1,190 ac (481 ha): The overall acreage of this unit has changed from the proposed 1,193 ac (483 ha) due to information received regarding the inclusion of developed properties managed by the California Department of Transportation. The three acres containing road developments have been dropped from the final designation, and are considered a mapping error.

CA 7, Dillon Beach, 30 ac (12 ha): This unit was excluded from critical habitat designation under section 4(b)(2) of the Act, primarily based upon the landowner's willingness to enter a partnership ensure conservation (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

CA 12A, Jetty Road to Aptos, 272 ac (110 ha): This subunit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

CA 12C, Monterey to Moss Landing, 788 ac (319 ha): We have corrected a mapping error which was made during preparation of the proposed rule; to correct that error, we have removed 15 ac from the final designation. The remainder of this subunit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

CA 15B, Atascadero Beach, 101 ac (40 ha): A 43-ac (17 ha) portion of this subunit managed by the City of Morro Bay was removed from the proposed subunit because we determined that this area is not essential to the conservation of the plover. The remainder of this subunit was excluded from critical habitat designation under section 4(b)(2)

of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

CA 16, Pismo Beach/Nipomo Dunes, 969 ac (392 ha): A 300-ac (121.4-ha) heavily used open riding area within Oceano Dunes State Vehicular Recreation Area was removed from the proposed unit because we determined that this area is not essential to the conservation of the plover. The remainder of this subunit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

CA 17, Vandenberg Air Force Base, 930 ac (376 ha): This unit, comprised of subunits CA 17A and CA 17B, is located on Vandenberg Air Force Base in Santa Barbara County, California. We have excluded all essential lands in this unit from the final critical habitat designation under section 4(b)(2) of the Act (see Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion).

CA 19A, Mandalay Beach to Santa Clara River, 410 ac (166 ha): As stated in the unit description in the proposed rule (69 FR 75608), this subunit extends 6.1 mi (9.8 km) north along the coast from the north jetty of the Channel Islands harbor to the Santa Clara River. However, the map of this subunit (Map 54), as published in the proposed rule, depicted this unit as starting about 1 mile north of the jetty (Hollywood Beach). We have corrected the map of subunit 19A to display the complete subunit, which includes Hollywood Beach.

CA 19B, Ormond Beach, 175 ac (71 ha): We removed a 28-ac (11 ha) area of subunit CA 19B, from the J Street drainage to the south jetty of Port Hueneme, because it is a highly disturbed and a heavily used recreational area. We determined that the area removed is not essential to the conservation of the plover.

CA 19C, Mugu Lagoon North, 321 ac (130 ha): This subunit is owned entirely by the Department of Defense (Naval Base Ventura). Naval Base Ventura County has a final approved INRMP that provides a conservation benefit to the western snowy plover. We have now determined that the Naval Base Ventura County is exempted under 4(a)(3) of the Act and thus these lands are removed from final designation.

CA 19D, Mugu Lagoon South, 87 ac (35 ha): This subunit is mostly owned



by Department of Defense (Naval Base Ventura). Based on a final INRMP which the Secretary has determined provides a benefit to the plover, the military portion is therefore exempted under section 4(a)(3) of the Act. However, there is a 18.3-ac (7.4 ha) section at its southern end of the subunit which extends into Pt Mugu State Park, owned and managed by the California Department of Parks and Recreation. The portion within the State Park is designated as critical habitat.

CA 22B, Bolsa Chica State Beach, 4 ac (2 ha): This subunit was mislabeled during the proposed rule process. The correct name, shown here for subunit CA 22B, is Bolsa Chica State Beach. The UTM's for the unit's legal description were also presented in error during the proposed rule, and are correctly provided with the subunits map. The overall acreage and ownership remain the same, as does the subunit's narrative description provided in the proposed rule (69 FR 75608).

CA 24, San Onofre Beach, 40 ac (16 ha): We have refined our mapping for Unit CA 24 to more accurately define the essential snowy plover habitat between San Onofre Creek and San Mateo Creek. The majority of snowy plover use in this area currently is located in a less visited portion of the beach closer to the mid-point between the two creek mouths. The result of this refined mapping is a reduction in the length of the proposed unit at both ends, removing critical habitat from Green Beach as well as beach areas to the north of San Mateo Creek mouth.

CA 27A, North Island/Coronado, 117 ac (47 ha): This subunit is exempted under section 4(a)(3) of the Act because of their approved INRMP that provides a benefit to the species (see Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion).

Subunit CA 27C, Silver Strand, 99 ac (40 ha): All Navy lands within subunit CA 27C are exempted under section 4(a)(3) of the Act because of their approved INRMP that provides a benefit to the species (see Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion). The remainder of this subunit (Silver Strand State Beach) was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act).

Subunit CA 27D, Delta Beach, 85 ac (35 ha): All lands within subunit CA 27D have been exempted under section

4(a)(3) of the Act because of the Navy's approved INRMP that provides a benefit to the species (see Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion).

#### Critical Habitat

Critical habitat is defined in section 3 of the Act as—(i) the specific areas within the geographic area occupied by a 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) that may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. "Conservation" means the use of all methods and procedures that are necessary to bring an endangered or a threatened species to the point at which listing under the Act is no longer necessary.

Critical habitat receives protection under section 7 of the Act through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a Federal agency. Section 7 requires consultation on Federal actions that are likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow government or public access to private lands.

To be included in a critical habitat designation, the habitat within the area occupied by the species must first have features that are "essential to the conservation of the species." 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 (*i.e.*, areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

Habitat occupied at the time of listing may be included in critical habitat only if the essential features thereon may require special management or protection. Thus, we do not include areas where existing management is sufficient to conserve the species. (As discussed below, such areas may also be excluded from critical habitat pursuant to section 4(b)(2).) Accordingly, when the best available scientific and commercial data do not demonstrate

that the conservation needs of the species so require, we will not designate critical habitat in areas outside the geographic area occupied by the species at the time of listing.

The Service's Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), and section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658) and the associated Information Quality Guidelines issued by the Service, provide criteria, establish procedures, and provide guidance to ensure that decisions made by the Service represent the best scientific and commercial data available. They require Service biologists to the extent consistent with the Act and with the use of the best scientific and commercial data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat. When determining which areas are critical habitat, a primary source of information is generally the listing package for the species. Additional information sources 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. All information is used in accordance with the provisions of section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658) and the associated Information Quality Guidelines issues by the Service.

Section 4 of the Act requires that we designate critical habitat on the basis of what we know at the time of designation. Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery.

Areas that support populations, but are outside the critical habitat designation, will continue to be subject to conservation actions implemented under section 7(a)(1) of the Act and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available information at the time of the



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, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

## Methods

As required by section 4(b)(1)(A) of the Act, we used the best scientific and commercial data available in determining areas that contain habitat features essential to the conservation of the Pacific Coast WSP. Data sources include research published in peer-reviewed articles; previous Service documents on the species, including the original critical habitat designation (Service 1999) and final listing determination (Service 1993); numerous surveys; and, aerial photographs and GIS mapping information from State sources and our files. We designated no areas outside the geographical area presently occupied by the species.

We have also reviewed available information that pertains to the habitat requirements of this species. Sources of information include data in reports submitted during section 7 consultations and by biologists holding section 10(a)(1)(A) recovery permits; research published in peer-reviewed articles and presented in academic theses and agency reports; regional Geographic Information System (GIS) coverages; and data collected in support of Habitat Conservation Plans and other local, State, and Federal planning documents.

Four steps were conducted to identify critical habitat units. First, we identified those areas occupied by the Pacific Coast WSP at the time of listing. Secondly, we identified, in accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, the physical and biological habitat features (also called primary constituent elements, or PCEs) at those sites that are essential to the conservation of the species. We mapped critical habitat unit boundaries at each site based on the extent of habitat containing sufficient PCEs to support biological function. The mapping itself was the third step, while the fourth and final step was to find that certain units, which do not require special management, do not meet the definition of critical habitat under section 3(5)(A) of the Act, and to exempt

other units that are subject to an approved INRMP that provides a benefit to the species under section 4(a)(3), and to exclude certain units based on section 4(b)(2) of the Act (see the Application of Section 3(5)(A) and 4(a)(3) and Exclusion under Section 4(b)(2) of the Act, below, for a detailed description). We discuss each of these steps more fully below in the section titled "Criteria Used to Identify Critical Habitat".

Our mapping process was based on the need to exclude areas that lack PCEs, while simultaneously accounting for the dynamic nature of beach habitat. Our mapping process also allowed us to provide a reasonable level of certainty to landowners regarding the location of unit boundaries relative to private lands.

We used Geographic Information Systems (GIS) software to establish landward bounds for those breeding and wintering sites that meet the criteria identified under the section titled "Criteria Used to Identify Critical Habitat". We drew the landward bounds so as to exclude habitat lacking PCEs, as determined using the most recent digital orthorectified aerial photographs available. We also incorporated appropriate input regarding PCEs received during the public comment periods. We set the landward bounds to remain fixed in place, defined by the UTM North American Datum 27 coordinates of their vertices and endpoints, because most private land is located near the landward bounds, and because the landward side of the unit is likely to change less over time than other boundaries.

We depict the mapped shoreline, or waterline, bounds of each unit according to mean low water (MLW), including waters of the Pacific Ocean proper, bays, estuaries, and rivers where water level is significantly influenced by tides. However, the actual critical habitat designation includes the intertidal zone extending to the water's edge. Use of the shoreline, or water's edge, as a boundary provides an easy-to-find landmark when visiting one of the designated critical habitat units. The water's edge incorporates essential habitat features that are constantly changing due to tides and wave action, beach erosion and aggradation, deposition of driftwood and stabilization due to vegetation growth, shifting windblown sand dunes, and other processes. For purposes of estimating unit sizes, we approximated MLW in California using the most recent GIS projection of MHW. We chose MHW because it is the only approximation of the coastline currently

available in GIS format. We were unable to obtain recent GIS maps of MHW or MLW for Oregon and Washington. Therefore, we approximated MLW for units in those States based on aerial photographs.

## Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, we are required to base critical habitat determinations on the best scientific and commercial data available and to consider those physical and biological features (primary constituent elements (PCEs)) that are essential to the conservation of the species, and that may require special management considerations and protection. These include, but are not limited to: Space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, and rearing (or development) of offspring; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

The specific primary constituent elements for the Pacific Coast WSP are derived from the biological needs of the Pacific Coast WSP as described in the previously published in our recent re-proposal of critical habitat, published on December 17, 2004 (69 FR 75608).

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

Pacific Coast WSPs establish nesting territories, but these can vary widely in size and do not provide adequate habitat for foraging. Pacific Coast WSP broods rarely remain in the nesting area until fledging (Warriner *et al.* 1986, Stern *et al.* 1990), and may travel along the beach as far as 4 miles (6.4 kilometers from their natal area) (Casler *et al.* 1993). Critical habitat must therefore extend beyond nesting territories to include space for foraging and water requirements during the nesting season, and space for over wintering.

### *Food and Water*

Pacific Coast WSPs typically forage in open areas by locating prey visually and then running to seize it with their beaks (Page *et al.* 1995a). They may also probe in the sand for burrowing invertebrates, or charge flying insects that are resting on the ground, snapping at them as they flush. Accordingly, they need open areas to forage and facilitate both prey location and capture. Areas with deposits of tide-cast wrack (e.g., kelp or driftwood) provide important foraging sites because they attract certain



invertebrates that plovers consume (Page *et al.* 1995a). Plovers forage both above and below high tide, but not while those areas are underwater. Therefore, foraging areas will typically be limited by water on their shoreward side and by dense vegetation or development on their landward sides.

Coastal plovers use sites of fresh water for drinking where available. However, some historic nesting sites have no obvious nearby freshwater sources, particularly in southern California. Researchers assume that adults and chicks in these areas obtain their necessary water from the food they eat. Accordingly, we have not included freshwater sites among the primary constituent elements of the Pacific Coast WSP population.

#### *Reproduction and Rearing of Offspring*

Pacific Coast WSPs nest in depressions that are open, relatively flat, and near tidal waters but far enough away to avoid being inundated by daily tides. Typical substrate is beach sand, although plovers are known to lay eggs in existing depressions with harder ground such as salt pan, cobblestones, or dredge tailings. Where available, dune systems with numerous flat areas and easy access to the shore are particularly favored for nesting. Additionally, plover nesting areas require shelter from predators and human disturbance, as discussed below. If nesting is successful, unfledged chicks will forage with one or both parents, using the same foraging areas and behaviors as adults.

#### *Cover or Shelter*

Plovers and their eggs are well camouflaged against light colored, sandy or pebbly backgrounds (Page *et al.* 1995a). Therefore, open areas with such substrates actually constitute shelter for purposes of nesting and foraging. Such areas provide little cover to predators, and allow plovers to fully utilize their camouflage and running speed. Chicks may also crouch near driftwood, dune plants and piles of kelp to hide from predators (Page and Stenzel 1981). Consequently, open areas do not provide shelter from wind and storms. These weather events are known to cause many nest losses, along with extreme high tides. Plovers readily scrape blown sand out of their nests, although there is little they can do to protect the nests against serious storms or flooding other than attempting to lay a new clutch if one is destroyed (Page *et al.* 1995a).

No studies have quantified the amount of vegetation cover that would make an area unsuitable for nesting or

foraging. However, coastal nesting and foraging locations typically have relatively well-defined boundaries between the favorable open sandy substrates and the unfavorable dense vegetation that occurs inland. Such boundaries are clearly visible in aerial and satellite photographs and therefore were used by us to map essential habitat features for this species.

#### *Undisturbed Areas*

Disturbance of nesting or brooding plovers by humans and domestic animals is a major factor affecting nest success of the Pacific Coast WSP. Plovers leave their nests when humans or pets approach too closely. Dogs may also deliberately chase plovers and trample nests, while vehicles may directly crush adults, chicks or nests, separate chicks from brooding adults, and interfere with foraging (Warriner *et al.* 1986, Service 1993 Ruhlen *et al.* 2003). Additionally, repeated flushing of incubating plovers exposes the eggs to the weather and deplete energy reserves needed by the adult. As a result, this could lead to reductions in nesting success. Surveys from 1994 to 1997 at Vandenberg Air Force Base, California, found the rate of nest loss on southern beaches with higher recreational use to be consistently higher than on north beaches where recreational use was much lower (Persons and Applegate 1997). Ruhlen *et al.* (2003) found that increased human activities on Point Reyes beaches resulted in a lower chick survival rate. Additionally, recent efforts (*i.e.*, use of docents, symbolic fencing, and public outreach) in various locations throughout the Pacific Coast WSP's range to direct recreational beach use away from nesting plovers, has resulted in higher reproductive success positively correlated with protection efforts in these areas (Page, *et al.* 2003 (summer 93 survey), Palermo 2004).

#### *Primary Constituent Elements for Pacific Coast WSP*

Based on our current knowledge of the life history, biology, and ecology of the species and the requirements of the habitat to sustain the essential life history functions of the species, we have determined that the Pacific Coast WSP's primary constituent elements are:

(1) Sparsely vegetated areas above daily high tides (*e.g.*, sandy beaches, dune systems immediately inland of an active beach face, salt flats, seasonally exposed gravel bars, dredge spoil sites, artificial salt ponds and adjoining levees) that are relatively undisturbed by the presence of humans, pets, vehicles or human-attracted predators;

(2) Sparsely vegetated sandy beach, mud flats, gravel bars or artificial salt ponds subject to daily tidal inundation but not currently under water, that support small invertebrates such as crabs, worms, flies, beetles, sand hoppers, clams, and ostracods; and,

(3) Surf or tide-cast organic debris such as seaweed or driftwood located on open substrates such as those mentioned above (essential to support small invertebrates for food, and to provide shelter from predators and weather for reproduction).

All areas designated as critical habitat for the Pacific Coast WSP were occupied by the species at the time of listing and contain sufficient primary constituent elements to support essential biological function. These primary constituent elements were identified on the bases that they are essential for Pacific Coast WSP reproduction, food supplies, and shelter from predators and weather elements. Additionally, these areas are essential because they provide protection from disturbance and space for growth and normal behavior.

#### *Unoccupied Areas Identified for Inclusion*

The Act has different standards for designation of critical habitat in occupied and unoccupied habitat. For areas occupied by the species, these are—(i) the specific areas on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection. For areas not occupied, a determination is required that the entire area is essential for the conservation of the species before it can be included in critical habitat.

Our proposed rule included a section containing Unoccupied Areas Identified for Inclusion, for which we requested comment regarding whether they should be included (in whole or in part) in the designation. Those areas identified for specific review were: WA 1, OR 1A, OR 1B, OR 2, OR 4, OR 5A, OR 5B, OR 6, OR 8C, OR 10B, OR 10C, OR 11, and OR 12. We also asked for comment on the appropriateness of designating areas that were occupied at the time of listing but are currently unoccupied.

Although public comment was generally favorable towards including the unoccupied areas in final critical habitat designation, we are designating only areas actually occupied at the time of listing in 1993 because we do not believe that the unoccupied areas are essential to the conservation of the species. Most of the unoccupied habitat considered for designation was in Oregon, where a State-wide effort is



underway to improve the survival and recovery of the Pacific Coast WSP through the development of a Habitat Conservation Plan. Additionally, the western snowy plover is State listed throughout Oregon, thereby already receiving regulatory protection beyond that associated with the Act. No areas outside of the range of the Pacific Coast WSP have been designated as critical habitat in this final rule.

#### **Criteria Used To Identify Critical Habitat**

To identify sites containing habitat features essential to the conservation of the Pacific Coast WSP (as defined above in our Methods section), we applied the following three criteria:

(1) Our first criterion for critical habitat unit selection was to choose sites in a geographic region capable of supporting breeding plovers. Where appropriate, we adjusted our estimates of the number of breeding birds a site could support according to additional information supplied by surveys and by local species and habitat experts.

(2) We added any major, currently occupied wintering sites not already selected under criterion one. This was necessary to provide sufficient habitat for the survival of breeding birds during the non-breeding season. A "major" wintering site must support more wintering birds than average for the geographical region.

(3) Finally, we added additional sites that provide unique habitat, or that are situated to facilitate interchange between otherwise widely separated units. This criterion is based on standard conservation biology principles for the conservation of rare and endangered animals and their habitats (Shaffer 1981, 1987, 1995; Fahrig and Merriam 1985; Gilpin and Soule 1986; Goodman 1987a, 1987b; Stacey and Taper 1992; Mangel and Tier 1994; Lesica and Allendorf 1995; Fahrig 1997; Noss and Csuti 1997; Huxel and Hastings 1998; Redford and Richter 1999; Debinski and Holt 2000; Sherwin and Moritz 2000; Grosberg 2002; and, Noss *et al.* 2002). By protecting a variety of habitats and facilitating interchange between them, we increase the ability of the species to adjust to various limiting factors that affect the population, such as predators, disease, major storms, and inbreeding.

We are designating critical habitat on lands that we have determined are

occupied at the time of listing and contain the PCEs.

Section 10(a)(1)(B) of the Act authorizes us to issue permits for the take of listed species incidental to otherwise lawful activities. An incidental take permit application must be supported by a habitat conservation plan (HCP) that identifies conservation measures that the permittee agrees to implement for the species to minimize and mitigate the impacts of the requested incidental take. We often exclude non-Federal public lands and private lands that are covered by an existing operative HCP and executed implementation agreement (IA) under section 10(a)(1)(B) of the Act from designated critical habitat because the benefits of exclusion outweigh the benefits of inclusion as discussed in section 4(b)(2) of the Act. Those HCPs that meet our issuance criteria and have been released for public notice and comment have been excluded from final critical habitat (see Table 2).

When determining critical habitat boundaries, we made every effort to avoid proposing the designation of developed areas such as buildings, paved areas, boat ramps and other structures that lack PCEs for the Pacific Coast WSP. Any such structures inadvertently left inside proposed critical habitat boundaries are not considered part of the proposed unit. This also applies to the land on which such structures sit directly. Therefore, Federal actions limited to these areas would not trigger section 7 consultations, unless they affect the species and/or primary constituent elements in adjacent critical habitat.

A brief discussion of each area designated as critical habitat is provided in the unit descriptions below. Additional detailed documentation concerning the essential nature of these areas is contained in our supporting record for this rulemaking.

When designating critical habitat, we assess whether the areas determined to be occupied at the time of listing and contain the PCEs may require special management considerations or protections.

#### **Special Management Considerations or Protections**

When designating critical habitat, we assess whether the areas determined to contain habitat features essential for conservation may require special

management considerations or protections. The threats affecting the continued survival and recovery of the Pacific Coast WSP within each of the proposed critical habitat units and that may require special management are described in the critical habitat unit descriptions in our December 17, 2004, proposed rule (69 FR 75608). Primary threats requiring special management considerations include disturbance of nesting or foraging plovers by humans, vehicles, and domestic animals, high levels of predation on eggs and young, and loss of habitat due to development and encroachment of dune-stabilizing vegetation such as European beachgrass (*Ammophila arenaria*) (Service 1993).

The areas designated as critical habitat for the Pacific Coast WSP will require some level of management and/or protection to (1) address the current and future threats to the species; and, (2) maintain the primary constituent elements essential to its conservation in order to ensure the overall conservation of the species. The designation of critical habitat does not imply that lands outside of critical habitat do not play an important role in the conservation of the plover. Federal activities that may affect those unprotected areas outside of critical habitat are still subject to review under section 7 of the Act if they may affect the Pacific Coast WSP. The prohibitions of section 9 (e.g., prohibitions against killing, harming, harassing, capturing plovers) also continue to apply both inside and outside of designated critical habitat.

#### **Critical Habitat Designation**

We are designating 32 units in Washington, Oregon, and California as critical habitat for the Pacific Coast WSP. All these units are within the range occupied by the species, and constitute our best assessment at this time of the areas containing habitat features essential for the conservation of the Pacific Coast WSP. The areas designated as critical habitat are outlined in Table 2 below.

Tables 1 and 2 show the approximate area not included in critical habitat pursuant to sections 3(5)(A), 4(a)(3) and 4(b)(2) of the Act (Table 1), and the approximate area designated as critical habitat for the Pacific Coast WSP by land ownership and State (Table 2).



TABLE 1.—APPROXIMATE AREA AC (HA) NOT INCLUDED IN CRITICAL HABITAT FOR THE PACIFIC COAST WSP PURSUANT TO SECTIONS 3(5)(A), 4(A)(3) AND 4(B)(2) OF THE ACT

Unit	Size		Basis of exclusion	
	Acres	ha		
WA 4. Leadbetter Pt .....	270	109	Mgt. Plan .....	3(5)(A)
CA 7. Dillon Beach .....	30	12	Conserv. Agreement .....	4(b)(2)
San Francisco Bay .....	1,847	747	Mgt. Plan .....	4(b)(2)
CA 12A. Jetty Rd. to Aptos .....	272	110	Economics .....	4(b)(2)
CA 12C. Monterey to Moss Lnd .....	803	325	Mgt. Plan economics .....	3(5)(A)/4(b)(2)
CA 15B. Atascadero .....	144	58	Economics .....	4(b)(2)
CA 15C. Morro Bay .....	611	247	Economics .....	4(b)(2)
CA 16. Pismo Beach/Nipomo Dunes .....	1,269	513	Mgt. Plan/economics .....	3(5)(A)/4(b)(2)
CA 17A. Vandenberg North .....	626	253	National Security .....	4(b)(2)
CA 17B. Vandenberg South .....	304	123	National Security .....	4(b)(2)
San Nicholas Island .....	534	212	INRMP .....	4(a)(3)
CA 19C. Magu Lagoon .....	321	130	INRMP .....	4(a)(3)
CA 19D. Magu Lagoon .....	69	28	INRMP .....	4(a)(3)
Camp Pendleton .....	49	20	INRMP .....	4(a)(3)
San Diego MSCP/HCP .....	23	9	Mgt. Plan .....	4(b)(2)
CA 27A. North Island .....	117	47	INRMP .....	4(a)(3)
CA 27C. Silver Strand .....	174	70	INRMP/economics .....	4(a)(3)/4(b)(2)
CA 27D. Delta Beach .....	85	35	INRMP .....	4(a)(3)
Total .....	7,548	3048		

The rationale for the use of an exclusion or exemption is provided in the sections below discussing the application of section 3(5)(A) and 4(a)(3) and exclusions under Section 4(b)(2) of the Act.

TABLE 2.—CRITICAL HABITAT UNITS DESIGNATED FOR THE PACIFIC COAST WSP

Unit	Federal		State/local		Private		Total	
	acres	ha	acres	ha	acres	ha	acres	ha
Washington:								
WA 2. Damon Pt., Oyhut .....	0	0	908	368	0	0	908	368
WA 3. Midway Beach .....	0	0	266	108	520	210	786	318
WA 4. Leadbetter Pt .....	0	0	832	337	0	0	832	337
Subtotal .....	0	0	2006	813	520	210	2526	1023
Oregon:								
OR 3. Bayocean Spit .....	85	34	122	49.5	0	0	207	83.5
OR 7. Baker/Sutton Beaches .....	260	105	0	0	0	0	260	105
OR 8. Siltcoos to Tenmile:								
OR 8A. Siltcoos BreachlcoosreachBreeBreach .....	8	3	0	0	0	0	8	3
OR 8B. Siltcoos River Spit to Tahkenitch Cr. Spit .....	527	213	0	0	0	0	527	213
OR 8D. Tenmile Creek Spit .....	234.5	95	0	0	0	0	234.5	95
OR 9. Coos Bay North Spit .....	278	113	0	0	0	0	278	113
OR 10A. Bandon to Floras Creek .....	298	121	171	69	163	66	632	256
Subtotal .....	1690.5	684	293	118.5	163	66	2146.5	868.5
California:								
CA 1. Lake Earl .....	0	0	11	5	46	19	57	24
CA 2. Big Lagoon .....	0	0	280	113	0	0	280	113
CA 3. McKinleyville Area:								
CA 3A. Clam Beach/Little River .....	0	0	131	53	24	10	155	63
CA 3B. Mad River .....	0	0	161	65	217	88	377	153
CA 4. Eel River Area:								
CA 4A. Humboldt Bay, S. Spit .....	20	8	354	143	0	0	375	152
CA 4B. Eel River N Spit/Beach .....	0	0	278	112	5	2	283	114
CA 4C. Eel River S Spit/Beach .....	0	0	4	2	397	161	402	163
CA 4D. Eel River Gravel Bars .....	0	0	255	103	938	379	1193	483
CA 5. MacKerricher Beach .....	0	0	1017	412	31	13	1048	424
CA 6. Manchester Beach .....	0	0	336	136	5	2	341	138
CA 8. Pt. Reyes Beach .....	462	187	0	0	0	0	462	187
CA 9. Limantour Spit .....	124	50	0	0	0	0	124	50
CA 10. Half Moon Bay .....	0	0	37	15	0	0	37	15



TABLE 2.—CRITICAL HABITAT UNITS DESIGNATED FOR THE PACIFIC COAST WSP—Continued

Unit	Federal		State/local		Private		Total	
	acres	ha	acres	ha	acres	ha	acres	ha
CA 11. Santa Cruz Coast:								
CA 11A. Waddell Cr. Beach .....	0	0	8	3	1	0.5	9	4
CA 11B. Scott Cr. Beach .....	0	0	0	0	19	8	19	8
CA 11C. Wilder Cr. Beach .....	0	0	10	4	0	0	10	4
CA 12. Monterey Bay Beaches:								
CA 12B. Elkhorn Sl Mudflat .....	0	0	281	114	0	0	281	114
CA 13. Pt. Sur Beach .....	0	0	61	25	0	0	61	25
CA 14. San Simeon Beach .....	0	0	28	11	0	0	28	11
CA 15. Estero Bay Beaches:								
CA 15A. Villa Cr. Beach .....	0	0	17	7	0	0	17	7
CA 18. Devereux Beach .....	0	0	36	15	0	0	36	15
CA 19. Oxnard Lowlands:								
CA 19A. Mandalay to Santa Clara R Mouth .....	0	0	245	99	105	42	350	142
CA 19B. Ormond Beach .....	0	0	175	71	0	0	175	71
CA 19D. Magu Lagoon S .....	0	0	87	35	0	0	87	35
CA 20. Zuma Beach .....	0	0	60	24	8	3	68	28
CA 21. Santa Monica Bay:								
CA 21A. Santa Monica Beach .....	0	0	6	2	19	8	25	10
CA 21B. Dockweiler N .....	0	0	43	17	0	0	43	17
CA 21C. Dockweiler S .....	0	0	13	5	11	5	24	10
CA 21D. Hermosa Beach .....	0	0	10	4	0	0	10	4
CA 22. Bolsa Chica Area:								
CA 22A. Bolsa Chica Reserve .....	0	0	0	0	591	239	591	239
CA 22B. Bolsa Chica St. Beach .....	0	0	4	2	0	0	4	2
CA 23. Santa Ana R Mouth .....	0	0	12	5	1	0	13	5
CA 24. San Onofre Beach .....	0	0	40	16	9	4	49	20
CA 25. Batiquitos Lagoon:								
CA 25A. Batiquitos West .....	0	0	15	6	6	3	21	9
CA 25B. Batiquitos Middle .....	0	0	15	6	8	3	23	9
CA 25C. Batiquitos East .....	0	0	0	0	21	8	21	8
CA 26. Los Penasquitos .....	0	0	24	10	0	0	24	10
CA 27. S. San Diego:								
CA 27B. North Island .....			44	18			44	18
CA 27E. Sweetwater NWR .....	77	31	0	0	51	21	128	52
CA 27F. Tijuana R. Beach .....	105	42	77	31	0	0	182	73
Subtotal .....	788	318	4175	1689	2508	1018.5	7477	3029
Total .....	2478.5	1002	6474	2620.5	3191	1294.5	12145	4921

We present brief descriptions of all of the units, and reasons why they are essential for the conservation of Pacific Coast WSP. The critical habitat features essential for the conservation of the Pacific Coast WSP are defined in the "Primary Constituent Elements" section above. All units are located within the range of the population, in the States of Washington, Oregon, and California. They are all considered currently occupied (with documented use by plovers since 2000), unless otherwise noted. Those units not currently occupied are considered essential to the conservation of the population for the reasons provided in the description.

#### Washington

WA 2, Damon Point/Oyhut Wildlife Area, 908 ac (368 ha): This unit is located at the southern end of the community of Ocean Shores and is a sandy spit that extends into Grays

Harbor. Damon Point includes the following features essential to the conservation of the species: sandy beaches that are relatively undisturbed by human or tidal activity (nesting habitat), large expanses of sparsely vegetated barren terrain, and mudflats and sheltered bays that provide ample foraging areas. Research in the mid 1980's indicated that up to 20 snowy plovers used the area for nesting. Plover use has declined somewhat over the past 20 years; currently between 6 and 9 adult birds use the site during the breeding season (average reproductive success at Damon is 1.5 chicks per male) (WDFW *in litt.* 2003). The conservation goal for WA 2 is 12 adult plovers. Approximately 99 percent of the 908-acre unit is administered by the State (Washington Department of Fish and Wildlife—227 ac (92 ha); Washington State Parks—63.6 ac (25.7 ha); and Washington Department of Natural

Resources—605.6 ac (245.1 ha)). The western edge of the unit lies adjacent to a municipal wastewater treatment facility that is managed by the City of Ocean Shores (9 ac (3.6 ha)). The access road has washed out and the area is currently inaccessible to motorized vehicles. Management may be needed to address threats to plovers from recreational use (pedestrians with dogs), habitat loss from European beachgrass, and potential re-opening of the vehicle access road.

WA 3, Midway Beach, 786 ac (318 ha): This unit is located between the community of Grayland and Willapa Bay and covers an area called Twin Harbors Beaches. Midway is an expansive beach and is nearly 0.5 mi (0.8 km) wide at the widest point. Beach accretion since 1998 has greatly improved habitat conditions, resulting in the re-establishment of a plover population at this site (WDFW *in litt.*



2000). Nearly half of the birds that nest and/or over-winter at Midway were banded in Oregon or Humboldt County, California (WDFW *in litt.* 2003). Threats at Midway include motorized vehicles combined with a lack of enforcement of the wet sand driving restrictions and human activity on holiday weekends (e.g., Fourth of July fireworks). Although public access is restricted on private property, beach driving is permitted below MHW. Approximately  $\frac{2}{3}$  (about 520 ac (210.4 ha)) of this unit is on private property with the remainder (266 ac (107.6 ha)) on State park lands. Private property rights extend to the mean low water line (MLW) in Washington State. The conservation goal for Midway Beach is 30 adult breeding birds. Twenty-eight plovers nested at this site during the 2003 breeding season, and the site has shown a relatively high average annual production of 1.3 to 1.9 chicks per male (WDFW *in litt.* 2003).

WA 4. Leadbetter Point/Gunpowder Sands, 832 ac (337 ha): The Leadbetter Point/Gunpowder Sands critical habitat unit is located at the northern end of the Long Beach Peninsula, a 26-mile (41.8-km) long spit that defines the west side of Willapa Bay and extends down to the mouth of the Columbia River. The unit is located just north of the community of Ocean Park. The portion of the spit within the Willapa National Wildlife Refuge has not been included in the final critical habitat designation under subsection 3(5)(a) of the Act, based on its existing management. As a result of Refuge exclusion, the unit size has decreased from 1,069 acres (433 ha) to its current 832 acres (337 ha). The southern portion of the unit, including Leadbetter Point State Park and the beach south of the state park boundary, is managed by the Washington State Parks and Recreation Department. State regulations, including motorized vehicle access during special shellfish seasons and recreational use, apply to the portion of the beach that is managed by the State. South of the Willapa NWR boundary, the state park jurisdiction follows an 1880 property line that extends well above the mean high tide line and includes all of the snowy plover nesting and foraging habitat in that part of the unit.

Leadbetter is the largest of the critical habitat units in Washington and covers approximately 832 acres (337 ha) over 7 miles (11.3 km) of coastline. The entire unit is on lands that are managed by Washington State. Approximately 30 snowy plovers nest and over-winter on the spit, with about 20–25 birds nesting north of the refuge boundary and 5–10 birds using the state park beaches to the

south (Service *in litt.* 2004). Plover use of the beaches south of the refuge boundary appears to be increasing. The unit includes PCEs such as: sandy beaches and sparsely vegetated dunes for nesting as well as miles of surf-cast organic debris and sheltered bays for foraging. The combined dynamics of weather and surf cause large quantities of wood and shell material to accumulate on the spit, providing prime nesting habitat, hiding areas from predators, foraging opportunities, and shelter from inclement weather for plover broods. The plover population at Leadbetter has been slowly increasing since intensive monitoring began in 1993 and we consider the area capable of supporting at least 30 breeding plovers given appropriate management.

The primary threat north of the refuge boundary is human disturbance during the spring razor clam season, which opens beaches to motorized vehicle and provides access into plover nesting areas that normally receive limited human use. Beaches south of the refuge are open to public use year round. The State Parks department has posted interpretive signs in areas being used by plovers and is increasing enforcement of the wet sand driving regulations.

#### Oregon

OR 3, Bayocean Spit, 207 ac (84 ha): This unit is on the western coast of Tillamook County, Oregon, and about 8 mi (12.9 km) northwest of the City of Tillamook. It is bounded by Tillamook Bay on the east, the Tillamook Bay South Jetty to the north, and the Pacific Ocean to the west. The unit is characteristic of a dune-backed beach in close proximity to mud flats and an estuary. It includes the following features essential to the conservation of the species (PCEs): large areas of sandy dune relatively undisturbed by human or tidal activity (for nesting and foraging); areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for foraging); and close proximity to tidally influenced estuarine mud flats (for foraging). Two breeding plovers and one wintering plover were documented in this unit in 1993 and 2000, respectively (ODFW *in litt.* 1994; Service *in litt.* 2004). This unit provides habitat capable of supporting 16 breeding plovers under proper management. The unit consists of 85 ac (34.4 ha) of federally owned land and 122 ac (49.4 ha) of county-owned land. The primary threats that may require special management in this unit are introduced European beachgrass that encroaches on the available nesting and foraging habitat; disturbance from

humans, dogs and horses in important foraging and nesting areas; and predators such as the common raven.

OR 7, Sutton/Baker Beaches, 260 ac (105.2 ha): This unit is on the western coast of Lane County, Oregon, about 8 mi (12.9 km) north of the City of Florence. It is bounded by Sutton Creek to the south, Heceta Head to the north, and the Pacific Ocean to the west. The unit is characteristic of a dune-backed beach and wide sand spits with overwash areas. It includes the following features essential to the conservation of the species: large areas of sandy dunes or sand spit overwashes relatively undisturbed by human or tidal activity (for nesting and foraging) and areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for foraging). Most recently documented plovers for this unit include an average of 2 breeding plovers in 2003 and 8 wintering plovers in 2004 (Lauten *et al.* *in litt.* 2003; Service *in litt.* 2004). This unit is capable of supporting 12 breeding plovers under proper management. The unit consists of 260 federally owned ac (105.2 ha) managed by the U.S. Forest Service in Siuslaw National Forest. The primary threats that may require special management in this unit are introduced European beachgrass that encroaches on the available nesting and foraging habitat; disturbance from humans, dogs and horses in important foraging and nesting areas; and predators such as the American crow and common raven.

Unit OR 8, Siltcoos to Tahkenitch Creek Spit: This unit includes two subunits within Lane and Douglas counties, Oregon.

Subunit OR 8A, Siltcoos Breach, 8 ac (3 ha): This subunit is on the southwestern coast of Lane County, Oregon, about 7 mi (11.3 km) southwest of the City of Florence. It is a large opening in the foredune just north of the Siltcoos River and is an important winter roost. The subunit is characteristic of a dune-backed beach in close proximity to a tidally influenced river mouth. It includes the following features essential to the conservation of the species: Sparsely vegetated areas of sandy dune relatively undisturbed by human or tidal activity (for roosting); areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for foraging); and close proximity to tidally influenced freshwater areas (for foraging). Recently documented plovers for this subunit include 20 wintering plovers in 2004 (Service *in litt.* 2004). The subunit consists of 8 federally owned acres (3.4



ha) managed by the U.S. Forest Service as the Oregon Dunes National Recreation Area in the Siuslaw National Forest. The primary threats that may require special management in this subunit are introduced European beachgrass that encroaches on the available roosting habitat and disturbance from OHVs in the important roosting areas.

Subunit OR 8B, Siltcoos River to Tahkenitch Creek Spit, 527 ac (213 ha): The northern end of this subunit is on the southwestern coast of Lane County, Oregon, about 7 mi (11.3 km) southwest of the City of Florence. The southern end is on the northwestern coast of Douglas County, Oregon, about 10 mi (16.1 km) northwest of the City of Reedsport. It is bounded by the Siltcoos River to the north, Tahkenitch Creek to the south and the Pacific Ocean to the west. The subunit is characteristic of a dune-backed beach and sand spit in close proximity to a tidally influenced river mouth. It includes the following features essential to the conservation of the species: Wide sand spits or wash overs and sparsely vegetated areas of sandy dune relatively undisturbed by human or tidal activity (for nesting and foraging); areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for foraging); and close proximity to tidally influenced freshwater areas (for foraging). Recently documented plovers for this subunit include an average of seven breeding plovers in 2003 and two wintering plovers in 2003 (Lauten *et al. in litt.* 2003; Service *in litt.* 2004). This subunit is capable of supporting 20 breeding plovers under proper management. The subunit consists of 527 federally owned acres (213.3 ha) managed by the U.S. Forest Service as the Oregon Dunes National Recreation Area in the Siuslaw National Forest. The primary threats that may require special management in this subunit are introduced European beachgrass that encroaches on the available nesting and foraging habitat; disturbance from humans, dogs and OHVs in important foraging and nesting areas; and predators such as the American crow and common raven.

OR 9, Coos Bay North Spit, 278 ac (112.5 ha): This unit is on the western coast of Coos County, Oregon, about 5 mi (8.0 km) west of the City of Coos Bay. It is bounded by Coos Bay to the east, the Coos Bay North Jetty to the south, and the Pacific Ocean to the west. The unit is characteristic of a dune-backed beach and interior interdune flats created through dredge material disposal or through habitat restoration. It includes the following features

essential to the conservation of the species (PCEs): Expansive sparsely vegetated interdune flats (for nesting and foraging); areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging); and close proximity to tidally influenced estuarine areas (for foraging). The most recently documented plovers for this unit include an average of 17 breeding and 3 wintering plovers in 2003 (Lauten *et al. in litt.* 2003; Service *in litt.* 2004). This unit provides habitat capable of supporting 54 breeding plovers under proper management. The unit consists of 278 federally owned acres (112.5 ha) primarily managed by the Bureau of Land Management. Threats that may require special management in this unit are introduced European beachgrass that encroaches on the available nesting and foraging habitat; disturbance from humans, dogs and OHVs in important foraging and nesting areas; and predators such as the American crow and common raven.

OR 10, Bandon/Cape Blanco Area: One subunit within this unit was identified as essential to the conservation of the species, near the town of Bandon in Coos and Curry Counties, Oregon.

Subunit OR 10A, Bandon to Floras Lake, 632 ac (256 ha): This subunit is on the southwestern coast of Coos County, Oregon, about 4 mi (6.4 km) south of the City of Bandon. It is bounded by China Creek to the north, the New River to the east, Floras Lake to the south, and the Pacific Ocean to the west. The subunit is characteristic of a dune-backed beach and barrier spit. It includes the following features essential to the conservation of the species: Wide sand spits or washovers and sparsely vegetated areas of sandy dune relatively undisturbed by human or tidal activity (for nesting and foraging); areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (foraging); and close proximity to tidally influenced freshwater areas (for foraging). The most recently documented plovers for this subunit include an average of 15 breeding and 18 wintering plovers in 2003 (Lauten *et al. in litt.* 2003; Service *in litt.* 2004). This subunit is capable of supporting 54 breeding plovers under proper management. The subunit consists of 298 ac (120 ha) of federally owned land, 171 ac (69 ha) of State-owned land, 12 ac of county-owned land (5 ha), and 163 ac (66 ha) of privately owned land. The Bureau of Land Management and the Oregon Parks and Recreation Department are the unit's primary land

managers. Threats that may require special management in this subunit are introduced European beachgrass that encroaches on the available nesting and foraging habitat; disturbance from humans, dogs, horses and OHVs in important foraging and nesting areas; and predators such as the common raven and red fox.

#### California

Unit CA 1, Lake Earl; 57 ac (24 ha): This unit is located directly west of the Lake Earl/Lake Tolowa lagoon system. The portion of the proposed unit extending north to Kellogg Road has been dropped from the final critical habitat designation, reducing the size of the unit from 91 acres (37 ha) to the designated 57 acres (24 ha). The narrow portion of the proposed unit that extended along the Pacific Shores housing development was removed from the final rule because of information received regarding the dense stands of non-native European beachgrass along an already narrow beach, the relatively steep slope of the beachfront, and intensive use by OHVs. These factors combined make the northern portion of the proposed unit non-essential habitat. As a consequence, the final designated unit extends slightly to the south on to State Park property, while avoiding the private property to the north.

The Lake Earl lagoon is approximately 3 mi (4.8 km) in length, encompasses 90.8 ac (36.7 ha), and lies approximately 2 mi (3.2 km) north of Point Saint George and the McNamara Airfield. Essential features of the unit for Pacific Coast WSP conservation include sandy beaches above and below the mean high tide line, wind-blown sand in dune systems immediately inland of the active beach face, and the wash over area at the lagoon mouth. The Lake Earl unit is a historical breeding site, and has harbored a small population of wintering plovers in recent years (Watkins, pers. comm. 2004). We expect this unit is capable of supporting 10 breeding plovers with adaptive management. All 57 ac (24 ha) are managed by the State under the jurisdiction of the California Department of Fish and Game, and California State Parks. Threats to the species include the following: Degradation of the sand dune system due to encroachment of European beachgrass; destruction of habitat and loss of wintering and nesting plovers from OHV use; and, destruction of habitat from annual mechanical breaching (as authorized by the U.S. Army Corp of Engineers (ACOE)) of the Lake Earl/Lake Tolowa lagoon.



Monitoring indicates that the practice of breaching has only temporary, short-term effects to wintering plovers.

CA 2, Big Lagoon, 280 ac (113 ha): This unit consists of a large sand spit that divides the Pacific Ocean from Big Lagoon. The northern extent of the Big Lagoon spit is approximately three mi (4.8 km) south of the Town of Orick. The unit contains the following features essential to the conservation of the Pacific Coast WSP (PCEs): Low lying sandy dunes and open sandy areas that are relatively undisturbed by humans; and sandy beach above and below the high tide line that supports small invertebrates. The Big Lagoon spit is historical nesting habitat, and currently maintains a winter population of fewer than 10 plovers (Watkins, pers. comm. 2001). We estimate the unit can support 16 breeding plovers. The unit is located on the spit, which is approximately 3.8 mi (6.1 km) in length. Most of the unit (279.2 ac, 113.0 ha) is managed by the California Department of Parks and Recreation (CA State Parks). An additional 0.6 ac (0.26 ha) are Humboldt County-managed. State Parks has conducted habitat restoration at this unit through the hand-removal of non-native vegetation. The primary threat to wintering and breeding plovers that may require special management is the disturbance from humans and dogs walking through winter flocks and potential nesting areas.

CA 3, McKinleyville Area: This unit consists of two subunits in the vicinity of McKinleyville, California, in Humboldt County.

CA 3A, Clam Beach/Little River, 155 ac (63 ha): The Little River/Clam Beach subunit's northern boundary is directly across from the south abutment of the U.S. Highway 101 bridge that crosses the Little River. The southern subunit boundary is aligned with the north end of the southernmost, paved Clam Beach parking area. The length of the unit is approximately 1.8 mi (2.8 km). Essential features of the subunit that contribute towards the conservation of the Pacific Coast WSP include large areas of sandy dunes, areas of sandy beach above and below the high tide line, and generally barren to sparsely vegetated terrain. The subunit currently supports a breeding population of approximately 12 plovers, and a winter population of up to 55 plovers (Colwell, *et al.* 2003). It has developed into one of four primary nesting locations within northern California. We expect the subunit to be capable of supporting six pairs of breeding plovers. The primary threats to nests, chicks, and both wintering and breeding adult plovers in this subunit are OHV use, predators, and disturbance

caused by humans and dogs. Of the total 154.9 ac (62.7 ha), approximately 81.5 acres (33 ha) are under the jurisdiction of the CA State Parks, 24.1 acres (9.8 ha) are in private ownership, and 49.5 acres (20 ha) are under the ownership and management of Humboldt County.

CA 3B, Mad River Beach, 377 ac (153 ha): This subunit was largely swept clean of European beachgrass when the Mad River temporarily shifted north in the 1980's and 1990's. The Mad River Beach subunit is approximately 2.8 mi (4.5 km) long, and ranges from the U.S. Highway 101 Vista Point below the Arcata Airport in the north, to School Road in the south. One hundred sixty one acres (65 ha) are owned and managed by Humboldt County, and 216.5 (87.6 ha) are privately owned. Essential features of the subunit that contribute towards the conservation of the Pacific Coast WSP include large areas of sandy dunes, areas of sandy beach above and below the high tide line, and generally barren to sparsely vegetated terrain. We expect the subunit to eventually support 12 breeding plovers with proper management. The current breeding population is believed to be less than 5 plovers, although plovers from this subunit readily intermix with plovers in CA 3A (Colwell, *et al.* 2003). Occasional winter use by plovers has been intermittently documented, with most wintering within the adjacent critical habitat unit to the north (Hall, pers. comm. 2003). The primary threats to nests, chicks, and both wintering and breeding adult plovers are OHV use, and disturbance caused by equestrians and humans with accompanying dogs.

Unit CA 4, Eel River Area: This unit consists of 4 subunits, 1 each on the north and south spits of the mouth of the Eel River, 1 for the Eel River gravel bars supporting nesting plovers approximately 5 to 10 mi (3 to 6 km) inland, and 1 extending from the south spit of Humboldt Bay to the beach adjacent to the north Eel River spit subunit.

Subunit CA 4A, Humboldt Bay, South Spit Beach, 375 ac (152 ha): This subunit is located across Humboldt Bay, less than one mile (<1.6 km) west of the City of Eureka, with the southern boundary being Table Bluff. Three hundred forty-four acres (139.3 ha) of the unit are owned by the California Department of Fish and Game, but are managed by the Federal Bureau of Land Management, 10.1 ac (4.1 ha) are owned and managed by the County of Humboldt, and 20.2 ac (8.2 ha) are owned by the U.S. Army Corps of Engineers. The subunit is 4.8 mi (7.7 km) in total length. The following

features essential to the conservation of the Pacific Coast WSP can be found within the unit: Large areas of sandy dunes, areas of sandy beach above and below the high tide line, and generally barren to sparsely vegetated terrain. The plover wintering population is estimated at under 15 individuals, and three nests, from 4 breeders, were attempted within the subunit in 2003 (Colwell, *et al.* 2003). This subunit is capable of supporting 30 breeding plovers. The Bureau of Land Management has conducted habitat restoration within the subunit, in consultation with us. The primary threats to adult plovers, chicks, and nests, are OHV use, and disturbance from equestrians and humans with dogs.

Subunit CA 4B, Eel River North Spit and Beach, 283 ac (114 ha): This subunit stretches from Table Bluff on the north to the mouth of the Eel River in the south. The subunit is estimated to be 3.9 miles (6.3 km) long, and is managed by the California Department of Fish and Game, except for five acres of private land. Essential features of the unit include: Large areas of sandy, sparsely vegetated dunes for reproduction and foraging, and areas of sandy beach above and below the high tide line supporting small invertebrates for foraging. Driftwood is an important component of the habitat in this subunit, providing shelter from the wind both for nesting plovers and for invertebrate prey species. The subunit's winter population of plovers is estimated at less than 20 (LeValley, 2004). As many as 11 breeders have been observed during breeding season window surveys, with a breeding population estimated at less than 15 (Colwell, *et al.* 2003). We expect this subunit to eventually support 20 breeding plovers with proper management. Threats include predators, OHVs, and disturbance from equestrians and humans with dogs.

Subunit CA 4C, Eel River South Spit and Beach, 402 ac (163 ha): This subunit encompasses the beach segment from the mouth of the Eel River, south to Centerville Road, approximately 4 miles (6.4 km) west of the Town of Ferndale. The subunit is 5 miles (8.3 km) long. 397.1 acres (160.7 ha) are private, and the remaining 4.4 ac (1.8 ha) are managed by Humboldt County. Essential features of the subunit include: Large areas of sandy dunes, areas of sandy beach above and below the high tide line, and generally barren to sparsely vegetated terrain. This subunit is capable of supporting 20 breeding plovers. A single nest was found during the 2004 breeding season (McAllister, pers. comm. 2004). The



winter population is estimated at under 80 plovers, many of which breed on the Eel River gravel bars (CA 5) (McAllister, pers. comm. 2003, Transou, pers. comm. 2003). Threats include predators, OHVs, and disturbance from equestrians and humans with dogs.

Subunit CA 4D, Eel River Gravel Bars; 1,190 ac (481 ha): The overall acreage of this unit has changed from the proposed 1,193 ac (483 ha) due to information received regarding the inclusion of developed properties managed by the California Department of Transportation. The 3 acres containing road developments have been dropped from the final designation, and is considered a mapping error.

This subunit is inundated during winter months due to high flows in the Eel River. It is 6.4 mi (10.3 km) from the Town of Fernbridge, upstream to the confluence of the Van Duzen River. The Eel River is contained by levees in this section, and consists of gravel bars and wooded islands. The subunit contains a total of 1,190 ac (481 ha), of which 176 ac (71) are owned and managed by Humboldt County, 76 ac (30 ha) are under the jurisdiction of the California State Lands Commission, and 938 ac (379 ha) are privately owned. Essential features of this subunit include bare, open gravel bars comprised of both sand and cobble which support reproduction and foraging. This Subunit harbors the most important breeding habitat in California north of San Francisco Bay, having the highest fledging success rate of any area from Mendocino County to the Oregon border. This subunit is capable of supporting 40 breeding plovers. Recent window surveys documented 22 breeding birds in this subunit (LeValley, pers. comm. 2004). Threats include predators, OHVs, and disturbance from gravel mining and humans with dogs.

CA 5, MacKerricher Beach, 1,048 ac (424 ha): This unit is approximately 3.5 miles (5.5 km) long. The unit is just south of the Ten Mile River, and approximately 4 miles (6.4 km) north of the City of Fort Bragg. 1,017.2 acres (411.6 ha) are managed by CA State Parks, and 31.2 acres (12.6 ha) are private. Essential features of the unit include: Large areas of sandy dunes, areas of sandy beach above and below the high tide line, and generally barren to sparsely vegetated terrain. State Parks has been conducting removal of European beachgrass to improve habitat for the Pacific Coast WSP and other sensitive dune species within the unit. This unit is capable of supporting 20 breeding plovers. The current breeding population is estimated at less than 10 (Colwell, *et al.* 2003). The winter

population of plovers is under 45 (Cebula, pers. comm. 2004). Threats to nests, chicks and both wintering and breeding adults include predators and disturbance from equestrians and humans with dogs.

CA 6, Manchester Beach, 341 ac (138 ha): The Manchester Beach unit is approximately 3.5 miles (5.7 km) in length. California State Parks manages 336.2 ac (136.1 ha) of the unit, while the remaining 4.8 ac (1.9 ha) are private. Essential features of the unit include: Large areas of sandy dunes, areas of sandy beach above and below the high tide line, and generally barren to sparsely vegetated terrain. This unit provides an important wintering site for the region (Service 2001). In 2003, a pair of plovers nested within the unit, and successfully hatched 2 chicks. However, those chicks did not survive (Colwell, *et al.* 2003). The current wintering population is estimated at less than 20 (Cebula, pers. comm. 2004). Threats to nests, chicks and both wintering and breeding adults include predators and disturbance from equestrians and humans with dogs.

CA 7, Dillon Beach, 30 ac (12 ha): This unit was excluded from critical habitat designation under section 4(b)(2) of the Act, primarily based upon the landowner's willingness to enter a partnership ensure conservation (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act). This unit is located at the mouth of Tomales Bay, just south of the town of Dillon Beach. It stretches for about 1.25 mi (2.01 km) north from Sand Point. PCEs provided by the unit include surf-cast debris supporting small invertebrates for foraging, and large stretches of relatively undisturbed, sparsely vegetated sandy beach, both above and below high tide line, for foraging and potentially for nesting. Although nesting has not been noted here, the unit is an important wintering area. One hundred twenty three wintering plovers were counted at this spot during the last winter survey in January 2004 (Page *in litt.* 2004). Other than State lands intermittently exposed below mean high tide, the unit is entirely on private land. Potential threats that may require special management include predators and disturbance by humans and their pets.

CA 8, Pt. Reyes Beach, 462 ac (187 ha): This unit occupies most of the west-facing beach between Point Reyes and Tomales Point. It is located entirely within the Point Reyes National Seashore, and consists primarily of dune backed beaches. The unit includes the following PCEs essential to plover conservation: Sparsely vegetated sandy

beach above and below high tide for nesting and foraging, wind-blown sand dunes for nesting and predator avoidance, and tide-cast debris attracting small invertebrates for foraging. It supports both nesting and wintering plovers, and can support 50 breeding birds with proper management. Threats in the area that may require special management include disturbance by humans and pets, and predators (particularly ravens and crows).

CA 9, Limantour Spit, 124 ac (50 ha): Limantour Spit is a roughly 2.25 mile (4.0 km) sand spit at the north end of Drake's Bay. The unit includes the end of the spit, and contracts to include only the south-facing beach towards the base of the spit. It is completely within the Point Reyes National Seashore. CA 9 can support both nesting and wintering plovers, although nesting has not been documented since 2000 (Page *in litt.* 2003, 2004). Ninety-five wintering plovers were counted at the site during the January 2004 survey (Page *in litt.* 2004). The unit is expected to contribute significantly to plover conservation in the region by providing habitat capable of supporting ten nesting birds. PCEs at the unit include sparsely vegetated beach sand, above and below high tide for nesting and foraging, and tide-cast debris supporting small invertebrates. Threats that may require special management include disturbance by humans and pets, and nest predators such as crows and ravens.

CA 10, Half Moon Bay, 37 ac (15 ha): This unit stretches for about 1.25 mi (2.01 km) along Half Moon Bay State Beach, and is entirely within California State Park land. It includes sandy beach above and below the high tide line for nesting and foraging, and surf-cast debris to attract small invertebrates. Small numbers of breeding birds have been found at the location in the past three surveys, including four breeding birds in the most recent survey, conducted in 2003 (Page *in litt.* 2003). The unit also supports a sizeable winter flock, consisting of 65 birds in 2004 (Page *in litt.* 2004). We expect the unit to eventually support ten breeding birds in the unit under proper management, which makes it a potentially significant contributor to plover conservation. Potential threats in the area that may require special management include disturbance by humans and pets, and nest predators.

CA 11, Santa Cruz Coast: This unit consists of three relatively small pocket beaches in Santa Cruz County, California. The unit forms an important link between larger breeding beaches to



the north and south, such as Half Moon Bay and the Monterey Bay beaches.

Subunit CA 11A, Waddell Creek Beach, 9 ac (4 ha): This subunit includes the mouth of Waddell Creek and is located about 20 mi (32.2 km) north of the city of Santa Cruz. It extends about 0.7 mi (1.1 km) north along the coast from a point about 0.1 mi (0.2 km) south of the creek mouth to a point about 0.6 mi (0.4 km) north of the creek. This unit was listed as being unoccupied in the proposed rule in error. From 3 to 11 nesting plovers were counted in this unit in the early 1990's, and the area also supported a sizeable wintering plover population of up to 50 birds during that time (Service 1991). More recently, at least one nest successfully hatched in 2004 and one in 2005 (G. Page, Point Reyes Bird Observatory, pers. comm. 2005). The area provides several essential habitat features, including wind-blown sand dunes, areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). With proper management, and in conjunction with the other two small units proposed for Santa Cruz County (CA 11B and 11C), this subunit can attract additional nesting plovers and thereby facilitate genetic interchange between the larger units at Half Moon Bay (CA 10) and Palm Beach and Moss Landing (CA 12) (see Criterion 3, Methods section, above). CA 11A encompasses approximately 8.1 ac (3.3 ha) of State land and 1.3 ac (0.5 ha) of private land. Human disturbance is the primary threat to plovers in the subunit that might require special management.

Subunit CA 11B, Scott Creek Beach, 19 ac (8 ha): This subunit includes the mouths of Scott and Molino creeks and is located about 13 mi (20.9 km) north of the city of Santa Cruz. It extends about 0.7 mi (1.1 km) north along the coast from the southern end of the sandy beach (0.3 mi (0.5 km) south of Molino Creek) to a point about 0.1 mi (0.4 km) north of Scott Creek. Recent surveys have found from 12 (in 2000) to 1 (in 2004) nesting plovers occupying the area (Page *in litt.* 2004), and it is an important snowy plover wintering area, with up to 114 birds each winter (Page *in litt.* 2004). This subunit is essential to the conservation of the species because with proper management, and in conjunction with the other two small units proposed for Santa Cruz County (CA 11B and 11C), it can attract additional nesting plovers and thereby facilitate genetic interchange between

the larger units at Half Moon Bay (CA 10) and Palm Beach and Moss Landing (CA 12) (see Criterion 3, Methods section, above). The subunit includes the following habitat features essential to the species: Areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). CA 13 is situated entirely on private land. Human disturbance and predators are the primary threats to snowy plovers in this subunit that may require special management.

Subunit CA 11C, Wilder Creek Beach, 10 ac (4 ha): This subunit is located at the mouth of Laguna Creek and is about 8 mi (12.9 km) north of the city of Santa Cruz. It extends about 0.5 mi (0.3 km) north along the coast from the southern end of the sandy beach to the northern end of the beach across the mouth of Laguna Creek. Five nesting plovers were found in the area in 2000 (Page *in litt.* 2004). The subunit includes the following essential features: Areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). CA 11C is capable of supporting sixteen breeding birds under proper management. The subunit is entirely situated on State-owned land. Disturbance from humans and pets, development, OHV use, pets, and predators are the primary threats to snowy plovers in this subunit that may require special management.

CA 12, Monterey Bay Beaches: This unit now includes one subunit within Monterey Bay, California, in parts of Santa Cruz and Monterey Counties.

Subunit CA 12A, Jetty Rd to Aptos, 272 ac (110 ha): This subunit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled *Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act*). This subunit is about 5 mi (8 km) west of the city of Watsonville and includes Sunset and Zmudowski State beaches. The mouth of the Pajaro River is located near the center of the unit, and Elkhorn Slough is at the south end of the unit. It extends about 8.5 mi (13.7 km) north along the coast from Elkhorn Slough to Zils Road. This is an important snowy plover nesting area, with 8–38 birds nesting each year, and is also an important wintering area, with up to 250 birds each winter (Page *in litt.*

2004)). This subunit is capable of supporting 54 breeding birds under proper management. It includes the following features essential to the species: Areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). CA 12A exists entirely on State lands. Human disturbance, development, horses, OHV use, pets, predators, and dune-stabilizing vegetation such as European beachgrass are the primary threats to snowy plovers in this subunit that may require special management.

Subunit CA 12B, Elkhorn Slough Mudflats, 281 ac (114 ha): CA 12B is about 3.5 mi (5.6 km) north of the city of Castroville along the north side of Elkhorn Slough east of Highway 1. It extends about 1 mi (1.6 km) along the north shore of Elkhorn Slough east of Highway 1 and about 0.5 mi (0.8 km) north from Elkhorn Slough to Bennett Slough. This is an important nesting area, with 6–47 birds nesting each year, and is also an important wintering area, with up to 95 birds each winter (Page *in litt.* 2004, Stenzel *in litt.* 2004). This subunit is capable of supporting 80 breeding birds under proper management. It includes the following features essential to the species: Areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). The subunit is situated entirely on State-owned land. Human disturbance, development, horses, OHV use, pets, predators, and vegetation are the primary threats to snowy plovers in this subunit that may require special management.

Subunit CA 12C, Monterey to Moss Landing, 788 ac (319 ha): This subunit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled *Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act*). This subunit includes the beaches along the southern half of Monterey Bay from the city of Monterey at the south end of the subunit to Moss Landing and the mouth of Elkhorn Slough at the north end of the unit. The mouth of the Salinas River is located near the center of the unit. It extends about 15 mi (24.2 km) north along the coast from Monterey to Moss Landing. This is an important nesting area, with 61 to 104 nesting birds each year, and is also an



important snowy plover wintering area, with up to 190 birds each winter (Page *in litt.* 2004, Stenzel *in litt.* 2004). This subunit is capable of supporting 162 breeding birds under proper management. It includes the following habitat features essential to the species: Areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). CA 12C includes approximately 470 ac (190 ha) of State and local lands, and 63 ac (25 ha) of Federal land. It would include an additional 142 ac (57.5 ha) of Federal land in the Salinas River National Wildlife Refuge, but we are excluding that area based on the existence of a Comprehensive Conservation Plan for Salinas River NWR that has undergone section 7 consultation (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act). Human disturbance, development, horses, OHV use, pets, predators, and habitat changes resulting from exotic vegetation are the primary threats to snowy plovers in this subunit that may require special management.

CA 13, Point Sur Beach, 61 ac (25 ha): This unit is about 17 mi (27.4 km) south of the city of Monterey and immediately north of Point Sur. It extends about 1 mi (1.6 km) north along the coast from Point Sur. This is an important snowy plover wintering area, with up to 65 birds each winter (Page *in litt.* 2004). A few nesting pairs (1–2) also occupy this unit each year (Stenzel *in litt.* 2004). This unit is capable of supporting 20 breeding birds under proper management. It includes the following features essential to the species: Wind-blown sand dunes, areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). This unit is situated entirely on State-owned land. Human disturbance and habitat changes due to exotic vegetation are the primary threats to snowy plovers in this unit that may require special management.

CA 14, San Simeon Beach, 28 ac (11 ha): CA 14, which is entirely within San Simeon State Beach, is located about 5 mi (8 km) south of San Simeon. It extends about 0.9 mi (1.5 km) north along the coast from a point opposite the intersection of Highway 1 and Moonstone Beach Drive to the northwestern corner of San Simeon State Beach. This is an important snowy plover wintering area, supporting 143

birds as documented by the most recent winter survey (Page *in litt.* 2004). The unit also supports a small number of nesting plovers: One nest hatched three chicks in 2002, and one nest was initiated but lost to predators in 2003 (Orr *in litt.* 2004). This unit includes the following features essential to the species: Areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). Human disturbance, pets, and dune stabilizing vegetation are the primary threats to snowy plovers in this unit that may require special management.

CA 15, Estero Bay Beaches: This unit now includes one subunit in Estero Bay, California, San Luis Obispo County. The subunit designated as critical habitat (CA 15A) is a pocket beach at the north end of the bay.

Subunit CA 15A, Villa Creek Beach, 17 ac (7 ha): The Villa Creek subunit is about 3.5 mi (5.6 km) northwest of the city of Cayucos, and is managed by the California Department of Parks and Recreation. Villa Creek Beach is located near the northern boundary of the Estero Bluffs property. It extends 0.3 mi (0.5 km) northwest along the beach from an unnamed headland 1.4 mi (2.3 km) north of Point Cayucos to an unnamed headland northwest of Villa Creek, and inland (north) for 0.25 mi (0.4 km) along Villa Creek. This subunit is an important breeding area that supports between 21 and 38 adults during the breeding season, and up to 31 nests (Larson 2003a). This area is also an important wintering site that supports up to 30 wintering birds (George 2001). It includes the following features essential to the species: Areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). Threats that may require special management include human disturbance, pets, horses, and predators.

Subunit CA 15B, Atascadero Beach, 101 ac (40 ha): This subunit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act). A 43-ac (17 ha) portion of this subunit from Highway 41/Atascadero Road south to Morro Bay Rock was removed as not essential to the conservation of the plover. This area is

heavily disturbed by recreational beach users and does not provide the features essential for the conservation of the species (e.g., an area free from disturbance) and is not, by definition, critical habitat. However, the remainder of subunit 15B was determined to be essential for western snowy plover conservation.

The subunit is located at Morro Strand State Beach near the city of Morro Bay, and is managed entirely by the California Department of Parks and Recreation. It extends about 1.6 mi (2.5 km) north along the beach from Atascadero Road/Highway 41 to an unnamed rocky outcrop opposite the end of Yerba Buena Street at the north end of Morro Bay. This is an important breeding area supporting up to 40 nests each year (Larson 2003b). CA 15B is also an important wintering area, with up to 152 wintering birds (Service 2001). This subunit is essential to species conservation because it contributes significantly to the regional conservation goal by providing habitat capable of supporting 40 breeding birds under proper management (Service 2001). It includes the following features essential to the species: Areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). Human disturbance, pets, and predators are the primary threats to plovers in this unit that may require special management.

Subunit CA 15C, Morro Bay Beach, 611 ac (247 ha): This subunit was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act). The subunit is located at Morro Bay near Morro Rock. The majority of the beach is managed by the California Department of Parks and Recreation, while the northern tip of the sand spit is owned by the city of Morro Bay. It extends 6.9 miles (11.1 km) north along the beach from a rocky outcrop about 0.2 mi (0.3 km) north of Hazard Canyon to the northern tip of the sand spit. This is an important breeding and wintering area that supports more than 100 breeding adults and up to 148 wintering birds (Page *in litt.* 2003). This subunit is capable of supporting 110 breeding birds under proper management. It includes the following features essential to the species: Wind-blown sand dunes, areas of above and below the high tide line with occasional surf-cast wrack



supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). Human disturbance, horses, pets, predators, and dune-stabilizing vegetation are the primary threats to plovers that may require special management.

CA 16, Pismo Beach/Nipomo Dunes, 969 ac (392 ha): A 300-ac (121.4-ha) portion of this unit was removed because we determined it was not essential to the conservation of the plover. The area removed consists of the heavily used open riding area at Oceano Dunes State Vehicular Recreation Area. The open riding area is the entire area open to recreation vehicles during the western snowy plover nesting season, and extends from the park entrance to post 6 (State Parks 2004). There are marker posts, numbered 1 through 8 along the coastal strand of the riding area to provide orientation. These posts are 0.5 miles apart. The open riding area is not essential for the conservation of the western snowy plover because it is subject to regular disturbance from both street legal vehicles and OHVs. Vehicle disturbance in the open riding area has precluded it from supporting a substantial number of nesting western snowy plovers (only one nest was established in the open riding area in 2004 [State Parks 2004]). The open riding area does not contain the features essential for the conservation of the species (e.g., an area free from disturbance) and is not, by definition, critical habitat. Therefore, we are not designating the open riding area, including the 3.5-mile (5.6 km) length of beach from the park entrance to the start of the nesting area at post 6, as critical habitat.

The remainder of this unit was either removed from critical habitat pursuant to section 3(5)(a) of the Act, based upon its existing management, or excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act). The remainder of the unit consists of two larger areas connected by a narrow strip of land below the mean high water (MHW) line. The narrow strip is all that remains of that part of the unit after the exclusion of Guadalupe/Nipomo Dunes National Wildlife Refuge. The Unit is located south of Grover City and Oceano and includes areas of Rancho Guadalupe County Park, managed by Santa Barbara County; and the Guadalupe Oil Field, the Oso Flaco Natural Area and Oceano Dunes Off-road Vehicular Recreation

Area, managed by the California Department of Parks and Recreation. The unit extends about 9 mi (14.5 km) north along the beach from a point about 0.4 mi (0.6 km) north of Mussel Point to Marker Post 6. Marker posts numbered 1 through 8, and 0.5 mile apart, occur along the coastal strand of the ODSVRA riding area to provide orientation to park visitors. This is an important breeding area capable of supporting between 123 and 246 breeding adults (Service 2001) and over 300 wintering birds (Service 2001; George 2001). This unit is essential to species conservation because it contributes significantly to the regional conservation goal by providing habitat capable of supporting 350 breeding birds under proper management (Service 2001). It includes the following features essential to the species: wind-blown sand dunes, areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). This unit includes approximately 469.7 ac (190 ha) of State and local land, and 498.9 ac (201.9 ha) of private land. Potential threats that may require special management include direct human disturbance, OHVs, horses, pets, and predators.

CA 17, Vandenberg: This unit, consisting of two subunits, is located on Vandenberg Air Force Base in Santa Barbara County, California. We have excluded all essential lands in this unit from the final critical habitat designation under section 4(b)(2) of the Act (see Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion).

Subunit CA 17A, Vandenberg North, 626 ac (253 ha): We have excluded all essential lands in this subunit from the final critical habitat designation under section 4(b)(2) of the Act (see Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion). This subunit is located on Vandenberg Air Force Base about 14 mi (22.5 km) southwest of the city of Santa Maria. It extends about 7.9 mi (12.7 km) north along the coast from a point along the beach 0.5 mi (0.8 km) south of Purisima Point to an unnamed creek or canyon 0.6 mi (1 km) south of Lion's Head, an area of rocky outcrops. This is an important breeding area that supports between 90 and 145 breeding adults (SRS 2003). This is also an important wintering area with up to 265 wintering birds (Page *in litt.* 2004). This

subunit is capable of supporting 250 breeding birds under proper management. It includes the following features essential to the species: wind-blown sand dunes, areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). The subunit is entirely owned by the U.S. Air Force. Disturbance of nesting by humans and pets, military activities, predators, and the spread of dense vegetation are the primary threats to plovers in this subunit that may require special management.

Subunit CA 17B, Vandenberg South, 304 ac (123 ha): We have excluded all essential lands in this subunit from the final critical habitat designation under section 4(b)(2) of the Act (see Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion). This subunit is located on Vandenberg Air Force Base about 9 mi (14.5 km) west of the city of Lompoc, and is entirely on U.S. Air Force land. It extends about 4.6 mi (7.4 km) north along the coast from an unnamed rocky outcrop 0.2 mi (0.3 km) north of Cañada la Honda Creek to the first rock outcropping along the beach north of the Santa Ynez River (0.8 mi (0.3 km) north of the river). This is an important breeding area that supports between 10 and 97 breeding adults (SRS 2003). This is also an important wintering area with up to 233 wintering birds (Page *in litt.* 2004). This subunit is capable of supporting 150 breeding birds under proper management. It includes the following features essential to the species: wind-blown sand dunes, areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). Human disturbance, military activities, pets, predators, and the spread of dense-growing vegetation are the primary threats to plovers in this subunit that may require special management.

CA 18, Devereux Beach, 36 ac (15 ha): This unit is situated entirely on State and local land at Coal Oil Point, about 7 mi (11.3 km) west along the coast from the city of Santa Barbara. It extends about 3.1 mi (1.9 km) north along the coast from the western boundary of Isla Vista County Park to a point along the beach opposite the end of Santa Barbara Shores Drive. In recent years, up to 18 breeding plovers have occupied this unit (Sandoval 2004). This unit is also



an important wintering area; three hundred and sixty birds were found in the area in the most recent winter survey (Page *in litt.* 2004). The unit includes the following features essential to the species: areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). Disturbance by humans and pets is the primary threat to snowy plovers in this unit that may require special management.

CA 19, Oxnard Lowlands: This unit includes four subunits near the city of Oxnard in Ventura County, California. This is an important snowy plover breeding location for this region of the coast, as the next concentration of nesting snowy plovers to the south is located on Camp Pendleton Marine Corps Base about 100 mi (160 km) away.

Subunit CA 19A, Mandalay Beach to Santa Clara River, 406 ac (164 ha): This subunit extends 6.1 mi (9.8 km) north along the coast from the north jetty of the Channel Islands harbor to a point about 0.5 mi (0.8 km) north of the Santa Clara River. However, the map of this subunit (Map 54), published in the proposed rule, depicted this unit as starting about 1 mile north of the jetty (Hollywood Beach). We have corrected the map of subunit 19A to display the complete subunit, which includes Hollywood Beach.

We removed a 4-ac (1.6 ha) area from the proposed subunit CA 19A because it is a highly disturbed and heavily used recreational area that includes volleyball courts. This area is heavily disturbed by recreational beach users and does not include the PCEs for the conservation of the species, and is not, by definition, critical habitat. However, with this removal, the final designation includes the remainder of subunit CA 19A as critical habitat.

This is an important snowy plover nesting area, with 9 to 70 birds nesting each year and is also an important wintering area for the plover, with up to 33 birds each winter (Service 2001). This unit is essential to species conservation because it contributes significantly to the regional conservation goal by providing habitat capable of supporting 64 breeding birds under proper management (Service 2001). It includes the following features essential to the species: wind-blown sand dunes, areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging

and predator avoidance). This unit includes approximately 104.5 ac (42.3 ha) of private land. The remaining 301.3 ac (123.5 ha) belongs to State or local agencies. Potential threats that may require special management include direct human disturbance, development, pets, and dune-stabilizing vegetation.

Subunit CA 19B, Ormond Beach, 175 ac (70.8 ha): This subunit is located on State lands near the cities of Port Hueneme and Oxnard. It extends about 2.9 mi (4.7 km) northwest along the coast from Arnold Road and the boundary of the Navy Base Ventura County, Point Mugu (NBVC) to the J Street Drainage, approximately 0.5 mi (0.8 km) east of the south jetty of Port Hueneme. We removed a 28-ac (11.3 ha) area of subunit CA 19B, from the J Street drainage to the south jetty of Port Hueneme, because it is a highly disturbed and heavily used recreational area that includes a fishing pier, picnic tables, barbecues, restaurant, parking lots, dog walk, and volleyball courts. This area is also the location of biennial sand replenishment activities. This area is heavily disturbed by recreational beach users and does not provide the PCEs essential for the conservation of the species (e.g., an area free from disturbance) and is not, by definition, critical habitat. However, we have designated the remainder of subunit CA 19B as critical habitat.

This subunit is an important snowy plover nesting area for this region of the coast, as the next concentration of nesting snowy plovers to the south (other than the adjacent unit CA 19C) is located on Camp Pendleton Marine Corps Base about 100 mi (160 km). The number of birds nesting within this unit has varied from about 20 to 34 per year (Service 2001). CA 19B is also an important wintering area for the plover, with up to 123 birds each winter (Service 2001). This subunit is essential to species conservation because it contributes significantly to the regional conservation goal by providing habitat capable of supporting 50 breeding birds under proper management (Service 2001). It includes the following features essential to the species: Wind-blown sand dunes, areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). Disturbance from humans and pets is the primary threat that may require special management for snowy plovers in this unit.

Subunit CA 19C, Mugu Lagoon North, 321 ac (130 ha): This subunit is owned

by DOD (Naval Base Ventura). The DOD portion is exempted under section 4(a)(3) of the Act because of their approved INRMP that provides a benefit to the species (see Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion). This subunit begins immediately adjacent to subunit CA 19B, at the northern coastal boundary of Navy Base Ventura County, Pt Mugu (NBVC), and extends about 3.3 mi (5.3 km) southeast. Surveys have generally provided information for the entire "Mugu Lagoon Beach" area, so plover population information provided here for CA 19C applies to CA 19D as well. The number of birds nesting in the area has varied from about 40 to 80 per year (Stenzel *in litt.* 2004). CA 19C and 19D are also important wintering areas for the plover, with up to 62 birds each winter (Page *in litt.* 2004). CA 19C and 19D are capable of supporting 110 breeding birds under proper management. They include the following features essential to the species: Areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). CA 19C is located entirely within the boundaries of the NBVC. Important threats that may require special management include direct human disturbance, military activities, and predators.

Subunit CA 19D, Mugu Lagoon South, 87 ac (35 ha): This subunit is mostly owned by DOD (Naval Base Ventura). The DOD portion is exempted under section 4(a)(3) of the Act because of the approved INRMP that provides a benefit to the species. Remaining in the designation is an 18.3-ac (7.4 ha) section at its southern end, which extends into Pt Mugu State Park, owned by the California Department of Parks and Recreation. Because surveys have commonly treated CA 19C and CA 19D as a single unit, plover population information for both subunits is provided in the narrative for CA 19C. The subunit contains the following features essential to the species: Areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). Important threats that may require special management include direct human disturbance, military activities, and predators.



CA 20, Zuma Beach, 68 ac (28 ha): This unit is located about 8 mi (3.2 km) west of the city of Malibu. It extends about 2.8 mi (4.5 km) north along the coast from the north side of Point Dume to the base of Trancas Canyon. This unit is an important wintering location for the plover, with 130 birds surveyed in January, 2004 (Page *in litt.* 2004). It includes the following essential features: Areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for foraging) and generally barren to sparsely vegetated terrain (for foraging and predator avoidance). This unit encompasses approximately 60 ac (24.3 ha) of CA State Parks lands, and 8 ac (3.2 ha) of privately owned land. Direct human disturbance, development, horses, and pets are the primary threats to snowy plovers in this unit that may require special management.

CA 21, Santa Monica Bay: This unit includes four subunits in Santa Monica Bay, Los Angeles County, California.

Subunit CA 21A, Santa Monica Beach, 25 ac (10 ha): This subunit is on the west coast of Los Angeles County, immediately west of the City of Santa Monica. It stretches roughly 0.9 miles (1.4 km) from Montana Avenue to the mouth of Santa Monica Canyon. This location includes the following essential habitat features: A wide sandy beach with occasional surf-cast wrack supporting small invertebrates. It supported a wintering flock of 32 plovers in 2004 (Page *in litt.* 2004), and annually supports a significant wintering flock of plovers in a location with high quality breeding habitat. The subunit consists of 25 ac (10 ha), of which 6 ac (2.4 ha) are owned by the CA State Parks, and 19 acres (7.7 ha) are private. The primary threats that may require special management in this subunit are disturbance from human recreational use, as well as beach raking, which removes the wrack line and reduces food resources.

Subunit CA 21B, Dockweiler North, 43 ac (17 ha): This subunit is located immediately west of the Los Angeles International Airport, south of Ballona Creek and west of the El Segundo Dunes. It stretches roughly 0.5 miles (0.8 km) centered at Sandpiper Street. Essential habitat features (PCEs) in the subunit include a wide sandy beach with occasional surf-cast wrack supporting small invertebrates. This subunit, in conjunction with subunits 21C and 21D, annually supports a significant wintering flock of plovers in a location with high quality breeding habitat (Page *in litt.* 2004). It is entirely owned by the California Department of

Parks and Recreation. The primary threats that may require special management are disturbance from human recreational use, as well as beach raking, which removes the wrack line and reduces food resources.

Subunit CA 21C, Dockweiler South, 24 ac (10 ha): This subunit is located immediately west of the City of El Segundo and the Hyperion Wastewater Treatment Plant. It stretches roughly 0.7 miles (1.1 km) centered at Grand Avenue. This location includes the following essential habitat features: A wide sandy beach with occasional surf-cast wrack supporting small invertebrates. In conjunction with subunits 21B and 21D it annually supports a significant wintering flock of plovers in a location with high quality breeding habitat (Page *in litt.* 2004). This subunit consists of 24 acres (9.7 ha), of which 13 acres (5.3 ha) are owned by the California Department of Parks and Recreation, and 11 acres (4.5 ha) are privately owned. The primary threats that may require special management in this subunit are disturbance from human recreational use, as well as beach raking, which removes the wrack line and reduces food resources.

Subunit CA 21D, Hermosa State Beach, 10 ac (4 ha): This subunit is located immediately west of the City of Hermosa Beach. This subunit stretches roughly 0.25 miles (0.4 km) from 2nd Street to 6th Street. This location includes the following PCEs: A wide sandy beach with occasional surf-cast wrack supporting small invertebrates. This location contained a wintering flock of 33 plovers in 2004, and 43 in 2003 (Clark *in litt.* 2004; Page *in litt.* 2004). In conjunction with subunits 21B and 21C it annually supports a large and significant wintering flock of plovers. This subunit consists of 10 acres (4 ha), all of which are owned by the California Department of Parks and Recreation. The primary threats that may require special management in this subunit are disturbance from human recreational use, as well as beach raking, which removes the wrack line and reduces food resources.

CA 22, Bolsa Chica Area: This unit includes two subunits in the vicinity of the Bolsa Chica wetlands in Orange County, California. The first of these subunits includes essential habitat in the wetlands themselves, while the second comprises a small area of beach immediately adjacent.

Subunit CA 22A, Bolsa Chica Reserve, 591 ac (239 ha): This subunit is located immediately west of the City of Huntington Beach and east of the Pacific Coast Highway. It contains the following essential habitat features: Tidally

influenced estuarine mud flats supporting small invertebrates, and seasonally dry ponds that provide nesting and foraging habitat for snowy plovers. This location supported 31 breeding adult plovers in 2003, and 38 in 2002 (Page *in litt.* 2003). This subunit annually supports one of the largest breeding populations of snowy plovers in the region, and contributes significantly to the conservation goal for the region by providing habitat capable of supporting 50 breeding birds under proper management. This subunit consists of 591 acres (239.2 ha), all of which are privately owned. The primary threat that may require special management in this subunit is egg and chick predation. This site, an abandoned oil field, is planned to undergo significant reconstruction and restoration, which should greatly increase the available breeding habitat for snowy plovers. Subunit CA 22B, Bolsa Chica State Beach; 13 ac (2 ha): This subunit was mislabeled during the proposed rule process. The correct name, shown here for subunit CA 22B, is Bolsa Chica State Beach. The UTM's for the unit's legal description were also presented in error during the proposed rule, and are correctly provided within this rule. CA 22B is located immediately west of the City of Huntington Beach and south of CA 22A. It stretches roughly 0.3 miles (0.4 km) from Seapoint Avenue north to the future lagoon mouth channel into Bolsa Chica Ecological Reserve. This location includes the following essential habitat features: A wide sandy beach with occasional surf-cast wrack supporting small invertebrates. The subunit contained a wintering flock of 11 plovers in 2004 (Page *in litt.* 2004), and annually supports a significant wintering flock of plovers in a location with high quality breeding habitat. This subunit consists of 12 ac (5 ha) owned by the California Department of Parks and Recreation and 1 ac (0.4 ha) that is privately owned. The primary threats that may require special management in this subunit are disturbance from human recreational use, as well as beach raking, which removes the wrack line and reduces food resources.

CA 23, Santa Ana River Mouth, 13 ac (5 ha): This unit is on the west coast of Orange County, immediately west of the City of Huntington Beach. It includes the following essential habitat features: A wide sandy beach with surf-cast wrack supporting small invertebrates, and tidally influenced estuarine mud flats that provide nesting and foraging habitat for snowy plovers. This site contains a large breeding colony of



California Least Terns and has also supported occasional breeding snowy plovers. This unit is the only beach front location in Orange County that supports adult plovers through the breeding season. The entire unit is owned by the California Department of Parks and Recreation. The primary threat that may require special management in this unit is disturbance from human recreational use.

Unit CA 24, San Onofre Beach; 40 ac (16 ha): This unit is on the west coast of San Diego County, at the northwest corner of Marine Corps Base Camp Pendleton. This unit stretches roughly 0.8 miles (1 km) from the mouth of San Mateo Creek to the mouth of San Onofre Creek and includes the following essential habitat features: A wide sandy beach with occasional surf-cast wrack supporting small invertebrates. This location contained a wintering flock of 14 plovers in January, 2004, with 60 recorded in January, 2003 (Clark *in litt.* 2004, Page *in litt.* 2004). This unit annually supports a large and significant wintering flock of plovers (Page *in litt.* 2004) and contributes significantly to the conservation goal for the region by providing habitat capable of supporting 15 breeding birds under proper management. The unit consists of 40 acres (16 ha), of which 37.5 ac (15 ha) are owned by the California Department of Parks and Recreation, and 2.5 ac (1 ha) are privately owned. The primary threat that may require special management in this unit is disturbance from human recreational use.

CA 25 (A, B and C), Batiquitos Lagoon, 65 ac (26 ha): This unit is on the west coast of San Diego County, between the cities of Carlsbad and Encinitas. The unit includes three subunits that make up the breeding islands created for nesting seabirds and shorebirds during restoration of the lagoon in 1996. Also included is a portion of South Carlsbad State Beach that supports a significant wintering population of plovers. This unit includes the following essential habitat features: Sandy beaches and tidally influenced estuarine mud flats with tide-cast organic debris supporting small invertebrates. This location contained a wintering flock of 82 plovers in 2004 (Page *in litt.* 2004). Nineteen breeding adults were recorded during the 2003 window survey (Page *in litt.* 2003). This unit annually supports a large and significant wintering flock of plovers, and contributes significantly to the conservation goal for the region by providing habitat capable of supporting 70 breeding birds under proper management. This unit consists of a

total of 65 acres (26 ha), of which 9 acres (4 ha) are owned by the California Department of Parks and Recreation, 21 acres (8 ha) are owned by the California Department of Fish and Game, and 35 acres (14 ha) are non-public. The primary threats that may require special management in this unit are egg and chick predation, as well as disturbance from human recreational use at South Carlsbad State Beach.

CA 26, Los Penasquitos, 24 ac (10 ha): This unit is located in San Diego County, immediately south of the City of Del Mar. It includes a portion of Torrey Pines State Beach that supports a significant wintering population of plovers. Essential habitat features supported by the unit include a wide sandy beach with occasional surf-cast wrack supporting small invertebrates, as well as tidally influenced estuarine mud flats with tide-cast organic debris. This location contained a wintering flock of 21 plovers in 2004, and 39 in 2003 (Clark *in litt.* 2004, Page *in litt.* 2004). This unit annually supports a large and significant wintering flock of plovers, and contributes significantly to the conservation goal for the region by providing habitat capable of supporting ten breeding birds under proper management. The unit consists of 24 acres (10 ha), all of which are owned by the California Department of Parks and Recreation. The primary threat that may require special management in this unit is disturbance from human recreational use.

CA 27, South San Diego Beaches: This unit includes six subunits in south San Diego County, California. Four of these subunits are on the Pacific coast, extending southwards from the mouth of San Diego Bay. The remaining two subunits (27D and 27E) are located in the San Diego Bay itself while a sixth subunit (27E) is in San Diego Bay itself.

Subunit CA 27A, North Island North, 117 ac (47 ha): This subunit is exempted under section 4(a)(3) of the Act because of their approved INRMP that provides a benefit to the species (see Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion). It is located immediately west of the City of Coronado. The subunit stretches roughly 1.9 miles (3 km) from Zuniga Point to the north end of Coronado City Beach. This subunit and the adjacent subunit 27B contain the following essential habitat features: A wide sandy beach with occasional surf-cast wrack supporting small invertebrates, as well as wind-blown sand in dune systems immediately inland of the active beach face. This location contained a wintering flock of 37 plovers in January,

2004 (Page *in litt.* 2004). Biologists also recorded 17 breeding adults during the 2003 window survey (Page *in litt.* 2003). These subunits annually support a large and significant wintering flock of plovers, and contribute significantly to the conservation goal for the region by providing habitat capable of supporting 20 breeding birds under proper management. This subunit is entirely on land owned by the Department of Defense. The primary threats that may require special management in these subunits are disturbance from human recreational use and military activities, as well as beach raking, which removes the wrack line and reduces food resources.

Subunit CA27B North Island S., 44 ac (18 ha): This subunit is located immediately west of the City of Coronado. This subunit stretches roughly 0.6 miles (0.9 km) from the boundary with NAS North Island to the south end of the natural sand dunes at Coronado City Beach. It includes the following essential habitat features: A wide sandy beach with occasional surf-cast wrack supporting small invertebrates, as well as wind-blown sand in dune systems immediately inland of the active beach face. This location is adjacent to the sizable plover population at NAS North Island, which contained a wintering flock of 37 plovers in January, 2004 (Page *in litt.* 2004). Biologists also recorded 17 breeding adults at North Island during the 2003 window survey (Page *in litt.* 2003). This subunit contributes significantly to the conservation goal for the region by providing habitat, in conjunction with the adjacent military lands, capable of supporting 20 breeding birds under proper management. This unit consists of land 44 acres owned by the City of Coronado. The primary threats that may require special management in these subunits are disturbance from human recreational use as well as beach raking, which removes the wrack line and reduces food resources.

Subunit CA 27C, Silver Strand, 99 ac (40 ha): All Navy lands within subunit CA 27C have been exempted under section 4(a)(3) of the Act because of their approved INRMP that provides a benefit to the species (see Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion). The remainder of this subunit (Silver Strand State Beach) was excluded from critical habitat designation under section 4(b)(2) of the Act based upon its high economic costs (see section titled Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section



4(b)(2) of the Act). This subunit is located immediately south of the City of Coronado. It stretches roughly 3.5 miles (5.6 km) along the Pacific coast side of the Silver Strand, from the southern end of NAB Coronado to the south end of the Naval Radio Receiving Facility. The essential habitat features of this subunit include a wide sandy beach with occasional surf-cast wrack supporting small invertebrates, as well as wind-blown sand in dune systems immediately inland of the active beach face. In conjunction with excluded habitat on NAB Coronado, this location contained wintering flocks totaling 56 plovers in 2004 (Page *in litt.* 2004). Fifty eight breeding adults were recorded during the 2003 window survey (Page *in litt.* 2003). This subunit annually supports a large and significant wintering flock of plovers (Page *in litt.* 2004), and will contribute significantly to the recovery goal for the region by supporting 65 breeding birds under proper management. The subunit consists of 96 ac (39 ha) owned by the California Department of Parks and Recreation, and 3 ac (1 ha) of non-public land. The primary threat that may require special management in this unit is disturbance from human recreational use and military training, as well as egg and chick predation.

Subunit CA 27D, Delta Beach, 85 ac (35 ha): All lands within subunit CA 27D have been exempted under section 4(a)(3) of the Act because of the Navy's approved INRMP that provides a benefit to the species (see Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act section for a detailed discussion). This subunit is located immediately south of the City of Coronado on the west side of San Diego Bay. It includes the following essential habitat features: sandy beaches above and below mean high tide line and tidally influenced estuarine mud flats with tide-cast organic debris that provide nesting and foraging habitat for snowy plovers. This location contained a wintering flock of 32 plovers in 2004 (Page *in litt.* 2004). It annually supports a large and significant wintering flock of plovers, and contributes significantly to the conservation goal for the region by providing habitat capable of supporting 10 breeding birds under proper management. This subunit consists of 85.3 acres (34.5 ha), all of which are owned by the Department of Defense. The primary threat that may require special management in this subunit is egg and chick predation.

Subunit CA 27E, Sweetwater National Wildlife Refuge, 128 ac (52 ha): This subunit is located immediately west of

the City of Chula Vista on the east side of San Diego Bay. It includes the following essential habitat features: Sandy beaches above and below mean high tide line and tidally influenced estuarine mud flats that provide nesting and foraging habitat for snowy plovers. This location contained a wintering flock of 36 plovers in 2004 (Page *in litt.* 2004). It annually supports a large and significant wintering flock of plovers, and contributes significantly to the conservation goal for the region by providing habitat capable of supporting 20 breeding birds under proper management. This subunit consists of 128 ac (52 ha), of which 77 ac (31 ha) are owned by the U.S. Fish and Wildlife Service, and 51 ac (21 ha) are privately owned. The primary threat that may require special management in this subunit is egg and chick predation.

Subunit CA 27F, Tijuana Estuary and Beach, 182ac (73.5 ha): This unit was slightly modified to remove a small amount of acreage of Navy land exempted under 4(a)(3) (See exemptions under 4(a)(3) below). The subunit is located immediately south of the City of Imperial Beach. It stretches roughly 2.3 miles (3.7 km) from the end of Seacoast Drive to the U.S./Mexico border. This location includes the following essential habitat features: A wide sandy beach with occasional surf-cast wrack supporting small invertebrates, as well as tidally influenced estuarine mud flats with tide-cast organic debris supporting small invertebrates for foraging. This subunit contained wintering flocks totaling 93 plovers in 2004 (Page *in litt.* 2004). It also supported at least 12 breeding adults in 2003, as indicated by the 2003 window survey (Page *in litt.* 2003). This subunit annually supports a large and significant wintering flock of plovers, and contributes significantly to the conservation goal for the region by providing habitat capable of supporting 40 breeding birds under proper management. The subunit is 182ac (73.5 ha), of which 76 acres (31 ha) are owned by the California Department of Parks and Recreation, 83 acres (34 ha) are owned by the U.S. Fish and Wildlife Service, and 22 acres (9 ha) are non-public. The primary threats that may require special management in this unit are disturbance from human recreational use and predation of chicks and eggs.

### Effects of Critical Habitat Designation

#### Section 7 Consultation

Section 7 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. In our regulations at 50 CFR 402.2, we define destruction or adverse modification as "a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to: Alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical." We are currently reviewing the regulatory definition of adverse modification in relation to the conservation of the species.

Section 7(a) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is proposed or designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402.

Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. We may issue a formal conference report if requested by a Federal agency. Formal conference reports on proposed critical habitat contain an opinion that is prepared according to 50 CFR 402.14, as if critical habitat were designated. We may adopt the formal conference report as the biological opinion when the critical habitat is designated, if no substantial new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)). The conservation recommendations in a conference report are advisory.

If a species is listed or critical habitat is designated, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a 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. Through this consultation, the action agency ensures that their actions do not destroy or adversely modify critical habitat.

When we issue a biological opinion concluding that a project is likely to result in the destruction or adverse modification of critical habitat, we also



provide reasonable and prudent alternatives to the project, if any are identifiable. "Reasonable and prudent alternatives" are defined at 50 CFR 402.02 as alternative actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Director believes would avoid destruction or adverse modification of 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 critical habitat is subsequently designated and the Federal agency has retained discretionary involvement or control over the action or such discretionary involvement or control is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation or a conference with us on actions for which formal consultation has been completed, if those actions may affect designated critical habitat, or adversely modify or destroy proposed critical habitat.

Federal activities that may affect the Pacific Coast WSP or its critical habitat will require consultation under section 7. Activities on private or State-owned lands, or lands under County or local jurisdictions requiring a permit from a Federal agency, such as a permit from the Army Corps of Engineers under section 404 of the Clean Water Act, a Section 10(a)(1)(B) permit from the Service, or some other Federal action, including funding (e.g., Federal Highway Administration or Federal Emergency Management Agency funding), will be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat and actions on non-Federal and private lands that are not federally funded, authorized, or permitted, do not require section 7 consultations.

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

of the Pacific Coast WSP. Federal activities that, when carried out, may adversely affect critical habitat for the Pacific Coast WSP include, but are not limited to:

(1) Actions and management efforts affecting Pacific Coast WSP on Federal lands such as national seashores, parks, and wildlife reserves;

(2) Dredging and dredge spoil placement activities that permanently remove PCEs to the extent the essential biological function of plover habitat is adversely affected for the foreseeable future;

(3) Construction and maintenance of eroded areas or structures (e.g., roads, walkways, marinas, salt ponds, access points, bridges, culverts) which interfere with plover nesting, breeding, or foraging, produce increases in predation, or promote a dense growth of vegetation that precludes an area's use by plovers;

(4) Stormwater and wastewater discharge from communities;

(5) Flood control actions that change the PCEs to the extent that the habitat no longer contributes to the conservation of the species.

Such activities may adversely modify critical habitat by flooding, covering with material, removing tide-cast organic debris, removing or depositing substrate in such a way as to diminish invertebrate prey, encourage dense vegetation growth, inundating an area with contaminants or failing to adequately provide for contaminant removal, or by failing to provide a relatively disturbance-free area for the completion of biological functions.

All lands designated as critical habitat are within the historical geographic area occupied by the species, and are likely to be used by the Pacific Coast WSP whether for foraging, breeding, growth of juveniles, dispersal, migration or sheltering. Some of these lands may currently be subject to activities identified as potentially adversely affecting the critical habitat. The Service will determine if Federal actions taken within these areas result in adverse modification to critical habitat when the Section 7 consultation process is implemented. We consider all lands included in this designation to be essential to the conservation of the species. Federal agencies already consult with us on activities that may affect the Pacific Coast WSP in areas currently occupied by the species to ensure that their actions do not jeopardize the continued existence of the species. Additionally, many of the critical habitat units designated under this rule were previously designated on December 9, 1999 (64 FR 68508). As a

consequence, we believe this designation of critical habitat is not likely to result in a significant regulatory burden above that already in place due to the presence of the listed species and previously designated critical habitat.

If you have questions regarding whether specific activities will constitute destruction or adverse modification of critical habitat, contact the Field Supervisor, Arcata Fish and Wildlife Office (see **ADDRESSES** section). Requests for copies of the regulations on listed wildlife and plants and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Branch of Endangered Species, 911 N.E. 11th Avenue, Portland, Oregon 97232 (telephone 503/231-2063; facsimile 503/231-6243).

*Application of Section 3(5)(A) and 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act*

Section 3(5)(A) of the Act defines critical habitat as the specific areas within the geographic area occupied by the species on which are found those physical and biological features (i) essential to the conservation of the species and (ii) which may require special management considerations or protection. Therefore, areas within the geographic area occupied by the species that do not contain the features essential for the conservation of the species are not, by definition, critical habitat. Similarly, areas within the geographic area occupied by the species that do not require special management also are not, by definition, critical habitat. To determine whether an area requires special management, we first determine if the essential features located there generally require special management to address applicable threats. If those features do not require special management, or if they do in general but not for the particular area in question because of the existence of an adequate management plan or for some other reason, then the area does not require special management.

We consider a current plan to provide adequate management or protection if it meets three criteria: (1) The plan is complete and provides a conservation benefit to the species (*i.e.*, the plan must maintain or provide for an increase in the species' population, or the enhancement or restoration of its habitat within the area covered by the plan); (2) the plan provides assurances that the conservation management strategies and actions will be implemented (*i.e.*, those responsible for implementing the plan are capable of accomplishing the objectives, and have an implementation



schedule or adequate funding for implementing the management plan); and, (3) the plan provides assurances that the conservation strategies and measures will be effective (*i.e.*, it identifies biological goals, has provisions for reporting progress, and is of a duration sufficient to implement the plan and achieve the plan's goals and objectives).

Section 318 of the fiscal year 2004 National Defense Authorization Act (Pub. L. 108–136) amended the Act to address the relationship of Integrated Natural Resources Management Plans (INRMPs) to critical habitat by adding a new section 4(a)(3)(B). This provision prohibits the Service from designating 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 INRMP prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary of the Interior determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.

Further, section 4(b)(2) of the Act states that critical habitat shall be designated, and revised on the basis of the best scientific data available after taking into consideration the economic impact, the impact on national security, and any other relevant impact of specifying any particular area as critical habitat. An area may be excluded from critical habitat if it is determined, following an analysis, that the benefits of such exclusion outweigh the benefits of specifying a particular area as critical habitat, unless the failure to designate such area as critical habitat will result in the extinction of the species.

In our critical habitat designations we used both the provisions outlined in sections 3(5)(A) and 4(b)(2) of the Act to evaluate those specific areas that we are proposing as critical habitat. Lands we have found do not meet the definition of critical habitat under section 3(5)(A), and lands excluded pursuant to section 4(b)(2), include those covered by the following types of plans if they provide assurances that the conservation measures they outline will be implemented and effective: (1) Legally operative HCPs that cover the species; (2) draft HCPs that cover the species and have undergone public review and comment (*i.e.*, pending HCPs); (3) Tribal conservation plans that cover the species; (4) State conservation plans that cover the species; and, (5) National Wildlife Refuge System Comprehensive Conservation Plans. See below for a detailed discussion.

*Relationship of Critical Habitat to Military Lands—Application of Section 4(a)(3) and Exclusions Under Section 4(b)(2) of the Act*

As discussed above, under section 4(a)(3) of the Act, the Secretary is prohibited from designating as critical habitat any Department of Defense lands or other geographical areas that are subject to an INRMP if the Secretary has determined in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation. In order to qualify for this exemption, an INRMP must be found to provide benefit to the species in question. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found there. Each INRMP includes an assessment of the ecological needs on the military installation, including conservation provisions for listed species; a statement of goals and priorities; a detailed description of management actions to be implemented to provide for these ecological needs; and a monitoring and adaptive management plan. We consult with the military on the development and implementation of INRMPs for installations with listed species. Habitat on military installations with completed and approved INRMPs that provide a benefit to the species are exempt from designation as critical habitat pursuant to section 4(a)(3)(B).

We are re-affirming our exemption of the U.S. Navy's San Nicolas Island and have exempted lands owned by U.S. Navy (Naval Base Coronado, Naval Base Ventura County) and the U.S. Marine Corps (Camp Pendleton) from this final critical habitat designation pursuant to section 4(a)(3) of the Act based on legally operative INRMPs that provide a benefit to the Pacific Coast WSP. This includes all or portions of Units CA 27 at Naval Base Coronado, CA at Camp Pendleton, and CA 19 and Naval Base Ventura County. In our December 17, 2004, proposed rule (69 FR 75608), we excluded Camp Pendleton and Naval Base Coronado under section 4(b)(2) of the Act for national security reasons, we now recognize that we are prohibited from designating critical habitat on those lands pursuant to section 4(a)(3) of the Act based on their legally operative INRMPs that have been found to provide a benefit to the Pacific Coast WSP. We are excluding all essential habitat on Vandenberg Air Force Base (AFB) under section 4(b)(2) of the Act based on impacts to national security. Vandenberg AFB is in the process of completing an INRMP and accompanying Endangered Species

Management Plan (ESMP), which will provide management for the Pacific Coast WSP.

**San Nicolas Island**

As described in our December 17, 2004, proposed rule (69 FR 75608) all 534 ac (212 ha) of essential habitat on San Nicolas Island, in Ventura County, California are exempt from this critical habitat designation pursuant to section 4(a)(3) of the Act. This area corresponds roughly to location CA–100 in our Draft Recovery Plan, is owned by the U.S. Navy, and contains habitat capable of supporting 150 breeding plovers with adaptive management. The U.S. Navy has completed an INRMP which addresses plover management for the area. The Secretary has determined that the INRMP provides a benefit to the species and provided a biological opinion during formal consultation under section 7 of the Act.

*Naval Base Coronado (NBC)*

The U.S. Navy completed a final INRMP in May 2002 for Naval Base Coronado, which includes North Island Naval Air Station, Naval Amphibious Base, Coronado, and Naval Radio Receiving Facility, that provides a benefit to the Pacific Coast WSP. The Proposed Management Strategy for the Western Snowy Plover (P. 4–56) itemizes the actions to which the Navy has committed in order to manage the species on their lands. Many of the items reiterate terms and conditions of previous biological opinions issued by the Service. However, the INRMP does go on to stipulate other actions above and beyond these requirements including minimizing activities which can affect invertebrate populations upon which shorebirds depend for foraging, identifying opportunities to use dredge material having high sand content for expansion and rehabilitation of beach areas to create improved nesting substrate, and replacing exotic iceplant and other nonnatives from remnant dunes with native vegetation to comply with Executive Order 13112 on Invasive Species and the Noxious Weed Act. These activities would enhance the habitat and population of western snowy plovers on Navy lands. Therefore, we find that the INRMP for Naval Base Coronado provides a benefit for the Pacific Coast WSP and pursuant to section 4(a)(3) of the Act, Navy lands within proposed unit CA 27 are exempt from critical habitat.

*Marine Corps Base, Camp Pendleton (MCBCP)*

The Marine Corps Base, Camp Pendleton completed a final INRMP in



October 2001 that provides a benefit to the Pacific Coast WSP. This INRMP itemizes the actions to which the Marine Corps has committed in order to manage the species on their lands. Many of the items reiterate terms and conditions of previous biological opinions issued by the Service. These include annually fencing and posting warning signs around the plover nesting areas; annually monitoring the plover population and locations, providing estimates of the number of breeding individuals, reproductive success, distribution, abundance, and habitat; and continuing predator control measures within the vicinity of plover nesting sites. These activities have enhanced the habitat and population of western snowy plovers at Camp Pendleton. Therefore, we find that the INRMP for Marine Corps Base, Camp Pendleton provides a benefit for the Pacific Coast WSP and pursuant to section 4(a)(3) of the Act, Marine Corps lands at Camp Pendleton are exempt from critical habitat.

#### *Naval Base Ventura County*

We have reviewed Naval Base Ventura County's INRMP and biological opinion, and the Secretary has determined that Naval Base Ventura County's INRMP provides a benefit to the western snowy plover and therefore, consistent with Public Law 108-136 (Nov. 2003): Nat. Defense Authorization Act for FY04 and Section 4(a)(3) of the Act, the Department of Defense's Naval Base Ventura County (subunits CA 19C and part of CA 19D) is exempt from critical habitat based on the adequacy of their legally operative INRMP.

#### *Vandenberg Air Force Base*

We are excluding Vandenberg AFB under section 4(b)(2) of the Act based on information we received regarding use of these areas for mission-essential training and the potential impacts on national security. Based on the following analysis, we find the benefit of excluding these units outweighs the benefit of including them, primarily due to the impact on national security.

The western snowy plover occupies 12.5 miles (20 km) of beach and dune habitat on Vandenberg Air Force Base. Vandenberg contains features essential to the conservation of the species and is of important biological value because it supports approximately 20 percent of the Pacific coast population of western snowy plovers.

The Air Force recognizes the need for protection and conservation of sensitive species, including the western snowy plover, on military lands and has identified conservation measures to

protect and conserve western snowy plovers and their habitat. The Air Force has coordinated with us to finalize the development of their Endangered Species Management Plan (ESMP) for the western snowy plover at Vandenberg, which currently guides management of all lands occupied by western snowy plovers at this base. The ESMP includes measures to minimize harm to the western snowy plover from base activities and outlines actions to ensure the persistence of western snowy plovers on the installation. The ESMP is an appendix to, and part of, the INRMP for Vandenberg Air Force Base. We anticipate the INRMP will be signed in late 2005.

#### *(1) Benefits of Inclusion*

The primary benefit of any critical habitat with regard to activities that require consultation pursuant to section 7 of the Act is to ensure that the activity will not destroy or adversely modify designated critical habitat. However, because the Air Force has worked cooperatively with the Service to develop an ESMP that protects the western snowy plover and its essential habitat on Vandenberg, and the nearly finalized INRMP is expected to be completed in 2005 (for which we will complete a Section 7 consultation), we do not believe that designation of critical habitat on the base will significantly benefit the western snowy plover beyond the protection already afforded the species under the Act. The designation of critical habitat may provide a different level of protection under section 7(a)(2) of the Act for the Pacific Coast WSP that is separate from the obligation of a Federal agency to ensure that their actions are not likely to jeopardize the continued existence of the endangered species. Under the *Gifford Pinchot* decision, critical habitat designations may provide greater benefits to the recovery of a species than was previously believed, but it is not possible to quantify this benefit at present. However, the protection provided is still a limitation on the harm that occurs as opposed to a requirement to provide a conservation benefit. We completed a section 7 consultation on the ESMP.

The area excluded as critical habitat is currently occupied by the species. If this area were designated as critical habitat, any actions with a Federal nexus which might adversely affect the critical habitat would require a consultation with us, as explained previously, in Effects of Critical Habitat Designation section. However, inasmuch as this area is currently occupied by the species, consultation

for Federal activities which might adversely impact the species or would result in take would be required even without the critical habitat designation. Primary constituent elements in this area would be protected from destruction or adverse modification by federal actions using a conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot*. This requirement would be in addition to the requirement that proposed Federal actions avoid likely jeopardy to the species' continued existence. However, as the area is occupied by the Pacific Coast WSP, consultation for activities which may adversely affect the species, including possibly significant habitat modification (see definition of "harm" at 50 CFR 17.3), would be required, even without the critical habitat designation. The requirement to conduct such consultation would occur regardless of whether the authorization for incidental take occurs under either section 7 or section 10 of the Act.

In *Sierra Club v. Fish and Wildlife Service*, 245 F.3d 434 (5th Cir. 2001), the Fifth Circuit Court of Appeals stated that the identification of habitat essential to the conservation of the species can provide informational benefits to the public, State and local governments, scientific organizations, and Federal agencies. The court also noted that heightened public awareness of the plight of listed species and their habitats may facilitate conservation efforts. However, we believe that there would be little additional informational benefit gained from including Vandenberg AFB within the designation because the educational benefits have been largely accomplished through the INRMP development process and development of the ESMP for the western snowy plover. The Air Force is already aware of essential western snowy plover habitat areas on the installation. In addition, we have already completed formal section 7 consultation on the ESMP.

#### *(2) Benefits of Exclusion*

Substantial benefits are expected to result from the exclusion of Vandenberg from critical habitat. The Air Force has stated in their February 7, 2005, comment letter that designation of beaches and coastline at Vandenberg, as critical habitat, would limit the amount of coastline available for executing their mission. Mission activities at Vandenberg include: Launching and tracking satellites in space, training missile crews, supporting ship to shore military training exercises, testing and evaluating the country's intercontinental ballistic missile



systems, and supporting aircraft tests in the Western Test Range/Pacific Missile Range (California, Hawaii, and the western Pacific Ocean). Designation of critical habitat on the base would require the Air Force to engage in additional consultation with us on activities that may affect designated critical habitat. The requirement to consult on activities occurring on the base could delay and impair the ability of the Air Force to conduct mission critical activities, thereby adversely affecting national security.

In addition, exclusion of Vandenberg beaches from the final designation will allow us to continue working with the Air Force in a spirit of cooperation and partnership. The DOD generally views designation of critical habitat on military lands as an indication that their actions to protect the species and its habitat are inadequate. Excluding these areas from the perceived negative consequences of critical habitat will facilitate cooperative efforts between the Service and the Air Force to formulate the best possible INRMP and ESMP, and continue effective management of the western snowy plover at Vandenberg Air Force Base.

### *(3) Benefits of Exclusion Outweigh the Benefits of Inclusion*

In 2004, we had a series of meetings with the Air Force to discuss their management of western snowy plovers, their essential habitat, and possible impacts to the base. We also received extensive comments from the Air Force during the public comment period. In light of the Air Force's ESMP for the western snowy plover, and the Air Force's need to maintain a high level of readiness regarding mission critical National security interests, we excluded critical habitat on all lands within unit CA 17, including all Vandenberg lands, under section 4(b)(2) of the Act. We find that the benefits of excluding these lands from critical habitat outweigh the benefits of including them.

### *(4) Exclusion Will Not Result in Extinction of the Species*

We find that the exclusion of these areas will not lead to the extinction of the western snowy plover because Air Force activities at Vandenberg have had little, if any, adverse effect on western snowy plovers, and the ESMP is expected to effectively manage for the persistence of the western snowy plovers at this installation. Also because these lands are occupied by plovers, any actions which might adversely affect the western snowy plover must undergo a consultation with the Service under the requirements of section 7 of the Act.

The western snowy plover is protected from take under section 9. The exclusions leave these protections unchanged from those which would exist if the excluded areas were designated as critical habitat. Based upon the above, we find that these exclusions would not result in extinction of the species.

### *Relationship of Critical Habitat to National Wildlife Refuges—Application of Section 3(5)(A) of the Act*

We are not including essential habitat in all or portions of units CA 12C, CA 16, and WA 4 that fall within the boundaries of Salinas River National Wildlife Refuge (NWR), Guadalupe-Nipomo Dunes NWR, or Willapa NWR respectively under section 3(5)(A) of the Act. The Salinas River NWR has completed a Comprehensive Conservation Plan (CCP) that addresses plovers, Willapa NWR is in the process of completing a CCP and is actively managing for snowy plovers on refuge lands, and Guadalupe-Nipomo Dunes NWR has completed a plover management plan. In order for the Secretary to determine that an area is adequately managed and does not require special management, the Secretary must evaluate existing management and find that it provides (1) a conservation benefit to the species; (2) reasonable assurances for implementation; and (3) reasonable assurances that conservation efforts will be effective. The Secretary has reviewed the management plans and actions for each of the three refuges and has determined that all three refuges are adequately managed for the Pacific Coast WSP, and therefore do not need special management are not included in this final critical habitat designation pursuant to section 3(5)(A) of the Act.

### **Salinas River NWR**

We are re-affirming our application of section 3(5)(A) of the Act to essential habitat at Salinas River NWR as described in our December 17, 2004, proposed rule (69 FR 75608). Salinas River NWR has completed a CCP that provides a conservation benefit to the Pacific Coast WSP. The CCP emphasizes the protection of plovers by a variety of means, including seasonal closure of nesting areas, nest exclosures, symbolic fencing (low cable fence used to discourage humans from approaching nests), and law enforcement patrols. Under the CCP plovers are monitored each breeding season for reproductive success and all nestlings are banded for further monitoring. In addition, mammalian predators are managed to selectively remove problem predators

during the plover breeding season. We expect funding to continue to this refuge through the Federal budget process to continue to implement the CCP. An intra-Service section 7 consultation was completed on the CCP on June 25, 2002 (Service 2002). The Service found that most of the management actions proposed in the CCP would be effective and provide a conservation benefit to plovers. Therefore, all essential habitat for the Pacific Coast WSP within the Salinas River NWR (142-ac (57.5 ha) portion of subunit 12C) is not included in this final critical habitat designation as these lands are adequately managed pursuant to section 3(5)(A) of the Act.

### **Guadalupe/Nipomo Dunes NWR**

We are re-affirming our application of section 3(5)(A) of the Act to essential habitat at Guadalupe/Nipomo Dunes NWR as described in our December 17, 2004, proposed rule (69 FR 75608). Guadalupe/Nipomo Dunes NWR has completed a plover management plan that provides a conservation benefit to this species. The plan provides for the protection of plovers by a variety of means, including seasonal closure of nesting areas, nest exclosures, symbolic fencing (low cable fence used to discourage humans from approaching nests), and law enforcement patrols. Under the plan plovers are monitored each breeding season for reproductive success; the number of plovers wintering on the refuge is also monitored. We expect funding to continue to this refuge through the Federal budget process to continue to implement the plover management plan. An intra-Service section 7 consultation was completed on the refuge's plover management plan on March 22, 2001 (Service 2001). The Secretary determined that the measures included in the plan would be effective and benefit plovers. Therefore, all essential habitat for the Pacific Coast WSP within the Guadalupe/Nipomo Dunes NWR (234-ac (94.7 ha) portion of unit 16) is not included in this final critical habitat designation as these lands are adequately managed pursuant to section 3(5)(A) of the Act.

### **Willapa NWR**

Willapa NWR is in the process of completing a CCP, and is currently operating under a management plan that was signed in 1986, which provides for management for the Pacific Coast WSP. Although the 1986 refuge management plan was signed and implemented prior to the Pacific Coast WSP listing in 1993, it addresses issues related to human disturbance and protection of the snowy



plover as a sensitive species, and serves as in interim management plan.

The Leadbetter Point Unit of Willapa NWR is one of the northern-most breeding sites for the Pacific Coast WSP. Refuge personnel from Willapa NWR have been monitoring snowy plovers on the refuge annually since 1984. Nest exclosures were first used on the refuge in 2004 and are credited with significant improvement in hatching success. The refuge has been posting snowy plover nesting areas on the Leadbetter Unit since the species was listed. Area closure signs are erected in early to mid-March each year and taken down in October. Symbolic fencing is erected at two areas where hiking trails emerge onto the beach to direct people to the wet sand portion of the beach. The Leadbetter unit of Willapa NWR is closed to motor vehicles except during special razor clam seasons (generally 2–3 days a month from late fall through early spring). Dogs are not permitted on the beach. The refuge is committed to minimizing disturbance to snowy plovers during the nesting season and will continue to manage public use at the Leadbetter Unit.

Historical nesting habitat for the snowy plover on Leadbetter Point consisted of extensive areas of open or sparsely vegetated, low dunes. Much of this habitat has been invaded by American and European beachgrass. The refuge initiated habitat restoration of historical nesting areas at Leadbetter Spit in 2002. Sixteen acres of beachgrass have been cleared to date and snowy plovers have nested every year in the restoration area since the first acre was cleared.

We expect funding to continue to this refuge through the federal budget process to continue implementing plover management and finalization and implementation of the CCP. The Secretary has determined that the management measures at Willapa NWR are effective and provide a conservation benefit to the Pacific Coast WSP. Therefore, all essential habitat for this species at Willapa NWR (Unit WA 4) is not included in this final critical habitat designation as these lands are adequately managed pursuant to section 3(5)(A) of the Act.

#### *Relationship of Critical Habitat to Approved Habitat Conservation Plans (HCPs)—Exclusions Under Section 4(b)(2) of the Act*

We are excluding critical habitat from approximately 23 ac (9.3 ha) of non-Federal lands within the San Diego Multiple Species Conservation Program (MSCP) Area under section 4(b)(2) of the Act. Non-Federal lands we are

excluding from critical habitat include lands at the mouth of the San Diego River.

#### **San Diego Multiple Species Conservation Program (MSCP)**

Section 4(b)(2) of the Act states that critical habitat shall be designated, and revised, on the basis of the best available scientific data available after taking into consideration the economic impact, impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. An area may be excluded from critical habitat if it is determined that the benefits of such exclusion outweigh the benefits of specifying a particular area as critical habitat, unless the failure to designate such area as critical habitat will result in the extinction of the species. Consequently, we may exclude an area from critical habitat based on economic impacts, impacts on national security, or other relevant impacts such as preservation of conservation partnerships, if we determine the benefits of excluding an area from critical habitat outweigh the benefits of including the area in critical habitat, provided the action of excluding the area will not result in the extinction of the species.

Below we first provide some general background information on the San Diego Multiple Species Conservation Plan/Habitat Conservation Plan (MSCP/HCP), followed by an analysis pursuant to section 4(b)(2) of the Act of the benefits of including San Diego MSCP/HCP land within the critical habitat designation, an analysis of the benefits of excluding this area, and an analysis of why we believe the benefits of exclusion are greater than those of inclusion. Finally, we provide a determination that exclusion of these lands will not result in extinction of the Pacific Coast WSP.

In southwestern San Diego County, the MSCP effort encompasses more than 236,000 ha (582,000 ac) and involves the participation of the County of San Diego and 11 cities, including the City of San Diego. This regional HCP is also a regional subarea plan under the NCCP program and is being developed in cooperation with California Department of Fish and Game. The MSCP provides for the establishment of approximately 69,573 ha (171,000 ac) of preserve areas to provide conservation benefits for 85 federally listed and sensitive species over the life of the permit (50 years), including the Pacific Coast WSP.

We have excluded from this critical habitat designation approximately 23 ac (9.3 ha) of non-Federal lands within the Multiple Habitat Preserve Alternative

(MHPA) that are targeted for conservation within the City of San Diego Subarea Plan under the San Diego Multiple Species Conservation Plan (MSCP) under section 4(b)(2) of the Act. Non-Federal lands that contain the features essential to the conservation of the species are excluded from critical habitat include lands at the mouth of the San Diego River for the Pacific Coast WSP.

Conservation measures specific to the Pacific Coast WSP within the San Diego MSCP/HCP include conservation of 93% of potential habitat (about 650 acres), including 99% of saltpan habitat and 90–95% of beach outside of intensive recreational beaches. The City of San Diego must implement measures to protect nesting sites from human disturbance during the reproductive season and control predators. Based on habitat preservation and potential impacts, direct effects to the species are not anticipated from implementation of the plan. Indirect effects will include edge effects from increased recreation uses, beach cleaning, and predation resulting from additional landscaping and structures that could be used as raptor perches. Effects to this species are to be minimized through conditions for coverage that include protection of nesting sites from human disturbance during the reproductive season and specific measures to protect against detrimental edge effects. No take of plovers was authorized through the plan.

#### *(1) Benefits of Inclusion*

Overall, we believe that there is minimal benefit from designating critical habitat for the Pacific Coast WSP within the San Diego MSCP/HCP because, as explained above, these lands are already managed for the conservation of covered species, including the Pacific Coast WSP. Below we discuss benefits of inclusion of these HCP lands.

A benefit of including an area within a critical habitat designation is the protection provided by section 7(a)(2) of the Act that directs Federal agencies to ensure that their actions do not result in the destruction or adverse modification of critical habitat. The designation of critical habitat may provide a different level of protection under section 7(a)(2) of the Act for the Pacific Coast WSP that is separate from the obligation of a Federal agency to ensure that their actions are not likely to jeopardize the continued existence of the endangered species. Under the *Gifford Pinchot* decision, critical habitat designations may provide greater benefits to the recovery of a species than was



previously believed, but it is not possible to quantify this benefit at present. However, the protection provided is still a limitation on the harm that occurs as opposed to a requirement to provide a conservation benefit. We completed a section 7 consultation on the issuance of the section 10(a)(1)(B) permit for the San Diego MSCP/HCP on June 6, 1997, and concluded that no take of this species is authorized under the plan, and therefore implementation of the plan is not likely to result in jeopardy to the species.

The area excluded as critical habitat is currently occupied by the species. If this area were designated as critical habitat, any actions with a Federal nexus which might adversely affect the critical habitat would require a consultation with us, as explained previously, in Effects of Critical Habitat Designation section. However, inasmuch as this area is currently occupied by the species, consultation for Federal activities which might adversely impact the species or would result in take would be required even without the critical habitat designation.

Primary constituent elements in this area would be protected from destruction or adverse modification by Federal actions using a conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot*. This requirement would be in addition to the requirement that proposed Federal actions avoid likely jeopardy to the species' continued existence. However, as the mouth of the San Diego River is occupied by the Pacific Coast WSP, consultation for activities which may adversely affect the species, including possibly significant habitat modification (see definition of "harm" at 50 CFR 17.3), would be required, even without the critical habitat designation. The requirement to conduct such consultation would occur regardless of whether the authorization for incidental take occurs under either section 7 or section 10 of the Act.

In *Sierra Club v. Fish and Wildlife Service*, 245 F.3d 434 (5th Cir. 2001), the Fifth Circuit Court of Appeals stated that the identification of habitat essential to the conservation of the species can provide informational benefits to the public, State and local governments, scientific organizations, and Federal agencies. The court also noted that heightened public awareness of the plight of listed species and their habitats may facilitate conservation efforts. However, we believe that there would be little additional informational benefit gained from including the San Diego MSCP/HCP within the designation because this area is

included in the HCP. Consequently, we believe that the informational benefits are already provided even though this area is not designated as critical habitat. Additionally, the purpose of the San Diego MSCP/HCP to provide protection and enhancement of habitat for the Pacific Coast WSP is already well established among State and local governments, and Federal agencies.

The inclusion of these 23 ac (9.3 ha) of non-Federal land as critical habitat would provide some additional Federal regulatory benefits for the species consistent with the conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot*. A benefit of inclusion would be the requirement of a Federal agency to ensure that their actions on these non-Federal lands do not likely result in jeopardizing the continued existence of the species or result in the destruction or adverse modification of critical habitat. This additional analysis to determine destruction or adverse modification of critical habitat is likely to be small because the lands are not under Federal ownership and any Federal agency proposing a Federal action on these 23 ac (9.3 ha) of non-Federal lands would likely consider the conservation value of these lands as identified in the San Diego MSCP/HCP and take the necessary steps to avoid jeopardy or the destruction or adverse modification of critical habitat.

As discussed below, however, we believe that designating any non-Federal lands within the MHPA as critical habitat would provide little additional educational and Federal regulatory benefits for the species. Because the excluded areas are occupied by the species, there must be consultation with the Service over any action which may affect these populations or that would result in take. The additional educational benefits that might arise from critical habitat designation have been largely accomplished through the public review and comment of the environmental impact documents which accompanied the development of the San Diego MSCP/HCP and the recognition by the City of San Diego of the presence of the threatened Pacific Coast WSP and the value of their lands for the conservation and recovery of the species.

For 30 years prior to the Ninth Circuit Court's decision in *Gifford Pinchot*, the Fish and Wildlife Service equated the jeopardy standard with the standard for destruction or adverse modification of critical habitat. However, in *Gifford Pinchot* the court noted the government, by simply considering the action's survival consequences, was reading the

concept of recovery out of the regulation. The court, relying on the CFR definition of adverse modification, required the Service to determine whether recovery was adversely affected. The *Gifford Pinchot* decision arguably made it easier to reach an "adverse modification" finding by reducing the harm, affecting recovery, rather than the survival of the species. However, there is an important distinction: Section 7(a)(2) limits harm to the species either through take or critical habitat. It does not require positive improvements or enhancement of the species status. Thus, any management plan which considers enhancement or recovery as the management standard will almost always provide more benefit than the critical habitat designation.

## (2) Benefits of Exclusion

As mentioned above, the San Diego MSCP/HCP provides for the conservation of occupied and potential habitat, the control of nest predators, and measures to protect nesting sites from human disturbance. The San Diego MSCP/HCP therefore provides for protection of the PCEs, and addresses special management needs such as predator control and management of habitat. Designation of critical habitat would therefore not provide as great a benefit to the species as the positive management measures in the plan.

The benefits of excluding lands within HCPs from critical habitat designation include relieving landowners, communities, and counties of any additional regulatory burden that might be imposed by a critical habitat designation consistent with the conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot*. Many HCPs, particularly large regional HCPs take many years to develop and, upon completion, become regional conservation plans that are consistent with the recovery objectives for listed species that are covered within the plan area. Additionally, many of these HCPs provide conservation benefits to unlisted, sensitive species. Imposing an additional regulatory review after an HCP is completed solely as a result of the designation of critical habitat may undermine conservation efforts and partnerships in many areas. In fact, it could result in the loss of species' benefits if participants abandon the voluntary HCP process because the critical habitat designation may result in additional regulatory requirements than faced by other parties who have not voluntarily participated in species conservation. Designation of critical habitat within the boundaries of



approved HCPs could be viewed as a disincentive to those entities currently developing HCPs or contemplating them in the future. Another benefit from excluding these lands is to maintain the partnerships developed among the City of San Diego, the State of California, and the Service to implement the San Diego MSCP/HCP. Instead of using limited funds to comply with administrative consultation and designation requirements which can not provide protection beyond what is currently in place, the partners could instead use their limited funds for the conservation of this species.

A related benefit of excluding lands within HCPs from critical habitat designation is the unhindered, continued ability to seek new partnerships with future HCP participants including States, Counties, local jurisdictions, conservation organizations, and private landowners, which together can implement conservation actions that we would be unable to accomplish otherwise. If lands within HCP plan areas are designated as critical habitat, it would likely have a negative effect on our ability to establish new partnerships to develop HCPs, particularly large, regional HCPs that involve numerous participants and address landscape-level conservation of species and habitats. By excluding these lands, we preserve our current partnerships and encourage additional conservation actions in the future.

Furthermore, an HCP or NCCP/HCP application must itself be consulted upon. While this consultation will not look specifically at the issue of adverse modification to critical habitat, unless critical habitat has already been designated within the proposed plan area, it will determine if the HCP jeopardizes the species in the plan area. In addition, Federal actions not covered by the HCP in areas occupied by listed species would still require consultation under section 7 of the Act. HCP and NCCP/HCPs typically provide for greater conservation benefits to a covered species than section 7 consultations because HCPs and NCCP/HCPs assure the long-term protection and management of a covered species and its habitat, and funding for such management through the standards found in the 5 Point Policy for HCPs (64 FR 35242) and the HCP "No Surprises" regulation (63 FR 8859). Such assurances are typically not provided by section 7 consultations that, in contrast to HCPs, often do not commit the project proponent to long-term special management or protections. Thus, a consultation typically does not accord the lands it covers the extensive benefits

a HCP or NCCP/HCP provides. The development and implementation of HCPs or NCCP/HCPs provide other important conservation benefits, including the development of biological information to guide the conservation efforts and assist in species conservation, and the creation of innovative solutions to conserve species while allowing for development.

In the biological opinion for the San Diego MSCP/HCP, the Service concluded that no take of this species is authorized under the plan and therefore implementation of the plan is not likely to result in jeopardy to the species.

### *(3) Benefits of Exclusion Outweigh the Benefits of Inclusion*

We have reviewed and evaluated the exclusion of critical habitat for the Pacific Coast WSP from approximately 23 ac (9.3 ha) of non-Federal lands within the San Diego MSCP/HCP; and based on this evaluation, we find that the benefits of exclusion (avoid increased regulatory costs which could result from including those lands in this designation of critical habitat, ensure the willingness of existing partners to continue active conservation measures, maintain the ability to attract new partners, and direct limited funding to conservation actions with partners) of the lands containing features essential to the conservation of the Pacific Coast WSP within the San Diego MSCP/HCP outweigh the benefits of inclusion (limited educational and regulatory benefits, which are largely otherwise provided for under the MSCP) of these lands as critical habitat. The benefits of inclusion of these 23 ac (9.3 ha) of non-Federal lands as critical habitat are lessened because of the significant level of conservation provided to the Pacific Coast WSP under the San Diego MSCP/HCP (conservation of occupied and potential habitat, control of nest predators, and restrictions on disturbance and harassment). In contrast, the benefits of exclusion of these 23 ac (9.3 ha) of non-Federal lands as critical habitat are increased because of the high level of cooperation by the City of San Diego and State of California to conserve this species and this partnership exceeds any conservation value provided by a critical habitat designation.

### *(4) Exclusion Will Not Result in Extinction of the Species*

We believe that exclusion of these 23 ac (9.3 ha) of non-Federal lands will not result in extinction of the Pacific Coast WSP since these lands will be conserved and managed for the benefit of this species pursuant to the San Diego

MSCP/HCP. The San Diego MSCP/HCP includes specific conservation objectives, avoidance and minimization measures, and management for the San Diego MSCP/HCP that exceed any conservation value provided as a result of a critical habitat designation.

The jeopardy standard of section 7 and routine implementation of habitat conservation through the section 7 process also provide assurances that the species will not go extinct. In addition, the species is protected from take under section 9 of the Act. The exclusion leaves these protections unchanged from those that would exist if the excluded areas were designated as critical habitat.

Critical habitat is being designated for the Pacific Coast WSP in other areas that will be accorded the protection from adverse modification by federal actions using the conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot*. Additionally, the species within the San Diego MSCP/HCP occurs on lands protected and managed either explicitly for the species or indirectly through more general objectives to protect natural values. These factors acting in concert with the other protections provided under the Act, lead us to find that exclusion of these 23 ac (9.3 ha) within the San Diego MSCP/HCP will not result in extinction of the Pacific Coast WSP.

### *Relationship of Critical Habitat to San Francisco Bay—Exclusions Under Section 4(b)(2) of the Act*

We are re-affirming our December 17, 2004, proposed rule exclusion of six units bordering the south San Francisco Bay totaling 1,847 ac (747.4 ha) under section 4(b)(2) of the Act (69 FR 75608). Pacific Coast WSP habitat in this region consists primarily of artificial salt ponds and associated levees, much of which has recently come under the management of various local, State and Federal agencies including the Service and the California Department of Fish and Game (CDFG). The agencies are developing a management and restoration plan for the salt ponds that will take into account the conflicting habitat needs of at least four threatened or endangered species (*i.e.*, Pacific Coast WSPs, clapper rails, salt marsh harvest mice, and least terns). Additionally, millions of migrating waterfowl and shorebirds that use this area yearly will be afforded protection in this area. The plan is expected to be completed in 2007. (Margaret Kolar, Service, *in litt.*, May 4, 2004).



*(1) Benefits of Inclusion*

The primary benefit of including an area within a critical habitat designation is the protection provided by section 7(a)(2) of the Act that directs Federal agencies to ensure that their actions do not result in the destruction or adverse modification of critical habitat. The designation of critical habitat may provide a different level of protection under section 7(a)(2) of the Act for the Pacific Coast WSP that is separate from the obligation of a Federal agency to ensure that their actions are not likely to jeopardize the continued existence of the endangered species. Under the *Gifford Pinchot* decision, critical habitat designations may provide greater benefits to the recovery of a species than was previously believed, but it is not possible to quantify this benefit at present. However, the protection provided is still a limitation on the harm that occurs as opposed to a requirement to provide a conservation benefit.

Primary constituent elements in this area would be protected from destruction or adverse modification by federal actions using a conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot*. This requirement would be in addition to the requirement that proposed Federal actions avoid likely jeopardy to the species' continued existence. However, as San Francisco Bay is occupied by the Pacific Coast WSP, consultation for activities which may adversely affect the species, including possibly significant habitat modification (see definition of "harm" at 50 CFR 17.3), would be required, even without the critical habitat designation. The requirement to conduct such consultation would occur regardless of whether the authorization for incidental take occurs under either section 7 or section 10 of the Act.

By including the six San Francisco Bay units in our final critical habitat designations, we could provide those areas with immediate critical habitat protection rather than waiting for the salt pond management plan to be completed in 2007. However, as discussed in the analyses for other excluded units above, the protections provided under section 7 largely overlap with protections resulting from critical habitat designation. Three of the excluded units are on the Don Edwards San Francisco Bay NWR, which is managed by the Service. Any significant changes to salt pond operations within those units would trigger consultation under section 7, as would the completion of the salt pond

management plan itself. Two of the units are on land managed by the CDFG, while the final and smallest unit is on land managed by a county governmental agency called the Hayward Area Recreation District (HARD). Both of these agencies are participating with the Service in development of the management plan, and neither would be directly affected by critical habitat designation since they are not Federal agencies. The Service is participating as well in the development of the management plan, making necessary an internal section 7 consultation evaluating the effects of the actions on the plan.

In *Sierra Club v. Fish and Wildlife Service*, 245 F.3d 434 (5th Cir. 2001), the Fifth Circuit Court of Appeals stated that the identification of habitat essential to the conservation of the species can provide informational benefits to the public, State and local governments, scientific organizations, and Federal agencies. The court also noted that heightened public awareness of the plight of listed species and their habitats may facilitate conservation efforts. The additional educational benefits that might arise from critical habitat designation have been largely accomplished through the ongoing development of the management plan for these areas.

For 30 years prior to the Ninth Circuit Court's decision in *Gifford Pinchot*, the Fish and Wildlife Service equated the jeopardy standard with the standard for destruction or adverse modification of critical habitat. However, in *Gifford Pinchot* the court noted the government, by simply considering the action's survival consequences, was reading the concept of recovery out of the regulation. The court, relying on the CFR definition of adverse modification, required the Service to determine whether recovery was adversely affected. The *Gifford Pinchot* decision arguably made it easier to reach an 'adverse modification' finding by reducing the harm, affecting recovery, rather than the survival of the species. However, there is an important distinction: Section 7(a)(2) limits harm to the species either through take or critical habitat. It does not require positive improvements or enhancement of the species status. Thus, any management plan which considers enhancement or recovery as the management standard will almost always provide more benefit than the critical habitat designation.

*(2) Benefits of Exclusion*

By excluding the six units from critical habitat designation, we avoid

restricting the flexibility for the development of the salt pond management plan which might otherwise establish habitat managed for plovers in other locations. The six excluded San Francisco Bay units were chosen based on recent high usage of those areas by plovers, although the plovers have demonstrated a willingness to travel relatively large distances within the Bay area to nest wherever habitat is most appropriate (Kolar *in litt.* 2004). Because plover habitat in the area can easily be created or removed in different areas by drying or flooding particular ponds, the management planners currently have the flexibility to move plover habitat to wherever it would be most advantageous in light of the conservation needs of the population and of other threatened and endangered species present in the Bay area. By designating critical habitat according to the current locations of essential habitat features, we would tend to lock the current management scheme into place for the designated units, thereby reducing management flexibility for other listed species and targeted ecosystems.

Additionally, the management planning process is a collaborative effort involving cooperation and input from numerous stakeholders such as landowners, public land managers, and the general public. This allows the best information and local knowledge to be brought to the table, and may encourage a sense of commitment to the Pacific Coast WSPs continuing well-being. We are unable to match this level of public participation in the critical habitat designation process due to time constraints. By excluding these lands, we preserve our current partnerships and encourage additional conservation actions in the future. Finally, the enhancement and management of plover habitat will benefit greatly from coordination between the various owners and managers in the area. The ongoing planning process can provide for that coordination, whereas the critical habitat designation process cannot. Designation of critical habitat would therefore not provide as great a benefit to the species as the positive management measures in a plan.

*(3) The Benefits of Exclusion Outweigh the Benefits of Inclusion*

We find that the Pacific Coast WSP will obtain greater benefits if we avoid designating habitat in the San Francisco Bay and instead allow participating agencies to complete their salt pond management plan unencumbered by critical habitat considerations. While



the salt pond management plan offers considerable benefits in comparison to critical habitat, we must also consider the likelihood that the plan will be completed. In this case we find the likelihood to be high because the major participants are all resource management agencies, and because the management plan is related to the recent purchase (*i.e.*, 16,500 ac (6,677 ha)) of salt ponds from a salt manufacturing company) by the Service and CDFG. This purchase involved the close cooperation of numerous resource management and environmental organizations. Accordingly, we are excluding six units in the south San Francisco Bay from designation.

#### (4) Exclusion Will Not Result in Extinction of the Species

Critical habitat is being designated for the Pacific Coast WSP in other areas that will be accorded the protection from adverse modification by federal actions using the conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot*. Also the jeopardy standard of section 7 and routine implementation of habitat conservation through the section 7 process provides assurances that the species will not go extinct. In addition, the species is protected from take under section 9 of the Act. The exclusion leaves these protections unchanged from those that would exist if the excluded areas were designated as critical habitat.

Additionally, the species occurs on lands protected and managed either explicitly for the species or indirectly through more general objectives to protect natural values. These factors acting in concert with the other protections provided under the Act, lead us to find that exclusion the six south San Francisco units will not result in extinction of the Pacific Coast WSP.

#### Relationship of Critical Habitat to Dillon Beach—Exclusions Under Section 4(b)(2) of the Act

We are excluding unit CA 7 (Dillon Beach) 30 ac (12 ha), at the mouth of Tomales Bay in Marin County, California, under section 4(b)(2) of the Act. Pacific Coast WSP habitat in this region consists primarily of sparsely vegetated sandy beach both above and below the high tide line. Approximately 95 percent of the unit is owned by Lawson's Landing, Inc. (Lawson), which operates a nearby campground. The remainder is owned by Oxfoot Associates, LLC (Oxfoot), which operates a day-use beach with associated parking lot. The location supports wintering plovers, but does not currently support any nesting (Page in

*litt.* 2004, Stenzel *in litt.* 2004). Wintering plovers are typically present at the site from July through February. The entire area is subject to moderate use by human pedestrians and unleashed dogs, which enter the beach from both the campground to the south and the day-use beach to the north.

In the period between the proposed designation and the final designation we have been in contact with the landowners and are in the process of developing conservation measures to assist in conserving Pacific Coast WSP and their habitat on Dillon Beach. Although finalization of the conservation measures have not been completed, we expect the measures will be finalized and will benefit Pacific Coast WSP conservation in the area.

#### (1) Benefits of Inclusion

The primary benefit of including an area within a critical habitat designation is the protection provided by section 7(a)(2) of the Act that directs Federal agencies to ensure that their actions do not result in the destruction or adverse modification of critical habitat. The designation of critical habitat may provide a different level of protection under section 7(a)(2) of the Act for the Pacific Coast WSP that is separate from the obligation of a Federal agency to ensure that their actions are not likely to jeopardize the continued existence of the endangered species. Under the *Gifford Pinchot* decision, critical habitat designations may provide greater benefits to the recovery of a species than was previously believed, but it is not possible to quantify this benefit at present. However, the protection provided is still a limitation on the harm that occurs as opposed to a requirement to provide a conservation benefit.

Primary constituent elements in this area would be protected from destruction or adverse modification by federal actions using a conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot*. This requirement would be in addition to the requirement that proposed Federal actions avoid likely jeopardy to the species' continued existence. However, as Dillon Beach is occupied by wintering plovers, consultation for activities which may adversely affect the species, including possibly significant habitat modification (see definition of "harm" at 50 CFR 17.3), would be required, even without the critical habitat designation. The requirement to conduct such consultation would occur regardless of whether the authorization for incidental

take occurs under either section 7 or section 10 of the Act.

The inclusion of these 30 ac (12 ha) of non-Federal lands as critical habitat would provide some additional Federal regulatory benefits for the species consistent with the conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot*. However, this additional benefit is likely to be small because the lands are not under Federal ownership and any Federal agency proposing a Federal action on these 30 ac (12 ha) of non-Federal lands would likely consider the conservation value of these lands as identified in the proposed deed restrictions and conservation strategy, and take necessary steps to avoid jeopardy or destruction or adverse modification of critical habitat.

By including the Dillon Beach unit in our final critical habitat designations, we could provide those areas with immediate critical habitat protection rather than waiting for the agreement to be completed. However, as discussed in the analyses for other excluded units above, the protections provided under section 7 largely overlap with protections resulting from critical habitat designation. The Service is participating as well in the development of the conservation measures with the landowners, and as such, evaluating the effects of the actions on the Pacific Coast WSP. Excluding these privately owned lands with conservation strategies from critical habitat may, by way of example, provide positive social, legal, and economic incentives to other non-Federal landowners who own lands that could contribute to listed species recovery if voluntary conservation measures on these lands are implemented.

In *Sierra Club v. Fish and Wildlife Service*, 245 F.3d 434 (5th Cir. 2001), the Fifth Circuit Court of Appeals stated that the identification of habitat essential to the conservation of the species can provide informational benefits to the public, State and local governments, scientific organizations, and Federal agencies. The court also noted that heightened public awareness of the plight of listed species and their habitats may facilitate conservation efforts. The additional educational benefits that might arise from critical habitat designation have been largely accomplished through the ongoing development of the management plan for this area.

For 30 years prior to the Ninth Circuit Court's decision in *Gifford Pinchot*, the Fish and Wildlife Service equated the jeopardy standard with the standard for destruction or adverse modification of



critical habitat. However, in *Gifford Pinchot* the court noted the government, by simply considering the action's survival consequences, was reading the concept of recovery out of the regulation. The court, relying on the CFR definition of adverse modification, required the Service to determine whether recovery was adversely affected. The *Gifford Pinchot* decision arguably made it easier to reach an 'adverse modification' finding by reducing the harm, affecting recovery, rather than the survival of the species. However, there is an important distinction: Section 7(a)(2) limits harm to the species either through take or critical habitat. It does not require positive improvements or enhancement of the species status. Thus, any management plan, or in this case proposed deed restriction with accompanying conservation strategy, which considers enhancement or recovery as the management standard will almost always provide more benefit than the critical habitat designation.

#### (2) Benefits of Exclusion

Lawson and Oxfoot (landowners) are working with the Service to place deed restrictions over the 30 ac (12 ha) of privately owned land at Dillon Beach identified as essential habitat. Working with the Service, Lawson is proposing to restrict development and habitat alteration on the 30 ac (12 ha) proposed for critical habitat, while Oxfoot, who controls the major access point to the beach is proposing to construct and maintain interpretive signage visible to beachgoers entering the property. Additionally, the major landowner and the Service are pursuing grant funding by the landowner and the Service to produce additional interpretive signs and flyers, which would be placed in easily visible locations on portions of the property. These conservation measures will protect the wintering plover habitat at Dillon Beach.

The provision restricting development and habitat alteration addresses the general rangewide threat of habitat loss, while the following provisions directly address the threat of disturbance by humans and pets, and indirectly address the threat of predators by encouraging beachgoers to avoid practices that might attract predators, such as leaving trash on the beach. Therefore, designation of critical habitat would not provide as great a benefit to the species as the positive management measures in the proposed plan.

Additionally, the management planning process is a voluntary collaborative effort involving cooperation and input from the

landowners and the Service. This cooperation allows the best information and local knowledge to be brought to the table, and may encourage a sense of commitment to the Pacific Coast WSPs continuing well-being. In this case, the landowner has explicitly stated that they would not be willing to work with the Service to conserve the Pacific Coast WSP and implement conservation measures if critical habitat is designated on their property. Finally, the enhancement and management of plover habitat will benefit greatly from coordination between the various owners and managers in the area. The ongoing planning process can provide for that coordination, whereas the critical habitat designation process cannot. Designation of critical habitat would therefore not provide as great a benefit to the species as the positive management measures in a plan. By excluding these lands, we preserve our current partnerships and encourage additional conservation actions in the future.

#### (3) The Benefits of Exclusion Outweigh the Benefits of Inclusion

We have reviewed and evaluated the exclusion of approximately 30 ac (12 ha) from the critical habitat designation for the Pacific Coast WSP. Based on this evaluation, we find that the benefits of exclusion (ensure willingness of existing partners to enact conservation measures, maintain ability to attract new partners) of the lands containing features essential to the conservation of the Pacific Coast WSP within Dillon Beach unit outweigh the benefits of inclusion (limited educational and regulatory benefits) of these lands as critical habitat. Allowing landowners to participate voluntarily to develop and implement management strategies and conservation measures will provide greater benefit to the species than designation of critical habitat alone. However, in weighing the benefits of inclusion versus the benefits of exclusion, the Service must also consider the likelihood that the conservation plan and accompanying deed restrictions will be completed. In this case we find the likelihood to be high because the major participants are all involved in the current process of developing conservation strategies for the Pacific Coast WSP and have voluntarily contacted the Service in the development of such measures. During the period between the proposed designation and the final designation we have been in contact with the local landowners and have established an excellent working relationship with the local landowners and their

representative and feel confident that an agreement will be reached in the near future for the conservation of the Pacific Coast WSP and its habitat. Accordingly, we are excluding the Dillon Beach unit from the designation.

#### (4) Exclusion Will Not Result in Extinction of the Species

We believe that exclusion of these 30 ac (12 ha) of non-Federal lands will not result in extinction of the Pacific Coast WSP since these lands are proposed to be conserved and managed under deed restriction and an accompanying conservation strategy. Additionally, critical habitat is being designated for the Pacific Coast WSP in other areas that will be accorded the protection from adverse modification by Federal actions using the conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot*. Also the jeopardy standard of section 7 and routine implementation of habitat conservation through the section 7 process provides assurances that the species will not go extinct. In addition, the species is protected from take under section 9 of the Act. The exclusion leaves these protections unchanged from those that would exist if the excluded areas were designated as critical habitat.

Additionally, the species occurs on lands protected and managed either explicitly for the species or indirectly through more general objectives to protect natural values. These factors acting in concert with the other protections provided under the Act, lead us to find that exclusion of the 30 ac (12 ha) Dillon Beach unit would not result in extinction of the Pacific Coast WSP.

#### Relationship of Critical Habitat to Economic Impacts—Exclusions Under Section 4(b)(2) of the Act

This section allows the Secretary to exclude areas from critical habitat for economic reasons if she determines that the benefits of such exclusion exceed the benefits of designating the area as critical habitat, unless the exclusion will result in the extinction of the species concerned. This is a discretionary authority Congress has provided to the Secretary with respect to critical habitat. Although economic and other impacts may not be considered when listing a species, Congress has expressly required their consideration when designating critical habitat.

In general, we have considered in making the following exclusions that all of the costs and other impacts predicted in the economic analysis may not be avoided by excluding the area, due to



the fact that all of the areas in question are currently occupied by the Pacific Coast WSP requirements for consultation under Section 7 of the Act, or for permits under section 10 (henceforth "consultation"), for any take of this species, which should also serve to protect the species and its habitat, and other protections for the species exist elsewhere in the Act and under State and local laws and regulations. In conducting economic analyses, we are guided by the 10th Circuit Court of Appeal's ruling in the New Mexico Cattle Growers Association case (248 F.3d at 1285), which directed us to consider all impacts, "regardless of whether those impacts are attributable co-extensively to other causes." As explained in the analysis, due to possible overlapping regulatory schemes and other reasons, there are also some elements of the analysis that may overstate some costs.

Conversely, the Ninth Circuit has recently ruled ("Gifford Pinchot", 378 F.3d at 1071) that the Service's regulations defining "adverse modification" of critical habitat are invalid because they define adverse modification as affecting both survival and recovery of a species. The Court directed us to consider that determinations of adverse modification should be focused on impacts to recovery. While we have not yet proposed a new definition for public review and comment, compliance with the Court's direction may result in additional costs associated with the designation of critical habitat (depending upon the outcome of the rulemaking). In light of the uncertainty concerning the regulatory definition of adverse modification, our current methodological approach to conducting economic analyses of our critical habitat designations is to consider all conservation-related costs. This approach would include costs related to sections 4, 7, 9, and 10 of the Act, and should encompass costs that would be considered and evaluated in light of the *Gifford Pinchot* ruling.

We are excluding all or portions of six units or subunits of the proposed critical habitat for economic reasons. Congress expressly contemplated that exclusions under this section might result in such situations when it enacted the exclusion authority. House Report 95-1625, stated on page 17: "Factors of

recognized or potential importance to human activities in an area will be considered by the Secretary in deciding whether or not all or part of that area should be included in the critical habitat \* \* \* In some situations, no critical habitat would be specified. In such situations, the Act would still be in force preventing any taking or other prohibited act \* \* \*" (emphasis supplied). We accordingly believe that these exclusions, and the basis upon which they are made, are fully within the parameters for the use of section 4(b)(2) set out by Congress. In reaching our decision about which areas should be excluded from the final critical habitat designation for economic reasons, we considered the following factors to be important: (1) The units (or subunits) with the highest cost; (2) a substantial break in costs from one unit (or subunit) to the next that may indicate disproportionate impacts; and (3) possible cost impacts to public works projects such as transportation or other infrastructure from the designation.

The draft economic analysis published in the **Federal Register** on August 16, 2005 (70 FR 48094) analyzed the economic effects of the proposed critical habitat designation for the Pacific Coast WSP in the States of Washington, Oregon, and California. The economic impacts of critical habitat designation vary widely between States, among counties, and even within counties. The counties most impacted by the critical habitat designation to the recreation and tourist industry are all located in either central or southern California, and include Santa Cruz, Monterey, San Luis Obispo, Santa Barbara, and San Diego counties. Further, economic impacts are unevenly distributed within counties. The analysis was conducted at the proposed unit or subunit level. The subunits with the greatest economic impacts include Vandenberg South (CA 17B), Atascadero Beach (CA 15B), Vandenberg North (CA 17A), Silver Strand (CA 27C), Jetty Road to Aptos (CA 12A), Morro Bay Beach (CA 15C), Pismo Beach/Nipomo (CA 16), and Monterey to Moss Landing (CA 12C). These 8 subunits make up approximately 90 percent of the total costs of designation. Vandenberg North (CA 17A) and Vandenberg South (CA 17B) are excluded under section 4(b)(2) of the Act based on National Security

concerns by the Air Force. Portions of Silver Strand (CA 27C) are exempt from this critical habitat designation under section 4(a)(3) of the Act. For a discussion of these exclusions and exemptions see the Relationship of Critical Habitat to Military Lands—Application of Section 4(a)(3) and Exclusions Under Section 4(b)(2) section. Had these units not already been excluded or exempted, they likely would have been excluded for economic reasons.

Mitigation requirements increase the cost of development and avoidance requirements are assumed to reduce coastal recreational opportunities and the quality of visits, thereby affecting the amount of localized tourism. Adverse impacts to coastal recreation and tourism are estimated to be 95 percent of the costs associated with this critical habitat designation for the Pacific Coast WSP. Management activities designed to enhance plover conservation accounts for approximately 3.3 percent of designation costs, while impacts to military operations (1.4 percent), development (0.2 percent) and gravel mining (0.1 percent) were also estimated. The total future costs (from 2005 to 2025) at the proposed critical habitat units are estimated to be \$272.8 million to \$645.3 million on a present value basis (\$514.9 to \$1,222.7 million expressed in constant dollars). Costs attributed to lost or diminished recreation and tourism ranges from \$244.4 million to \$611.1 million. Future costs to the military resulting from the designation would be approximately \$9.1 million in present value terms, plus adverse impacts to military readiness and national security that are not monetized.

A copy of the final economic analysis with supporting documents are included in our administrative record and may be obtained by contacting U.S. Fish and Wildlife Service, Branch of Endangered Species (see **ADDRESSES** section).

#### **Economic Exclusions**

We have considered, but are excluding from critical habitat for the Pacific Coast WSP essential habitat in the six subunits and counties listed in Table 3.



TABLE 3.—EXCLUDED SUBUNITS AND ESTIMATED COSTS

Unit or subunit	County	Economic impact in draft EA (\$)
CA 12A: Jetty Rd.—Aptos .....	Santa Cruz and Monterey .....	48,563,000
CA 12C: Monterey—Moss Landing .....	Monterey .....	210,378,000
CA 15B: Atascadero Beach .....	San Luis Obispo .....	31,395,000
CA 15C: Morro Bay Beach .....	San Luis Obispo .....	73,584,000
CA 16: Pismo Beach/Nipomo .....	San Luis Obispo and Santa Barbara .....	109,309,000
CA 27C: Silver Strand .....	San Diego .....	43,714,000
Total .....	.....	516,943,000

The notice of availability of the draft economic analysis (70 FR 48094: August 16, 2005) solicited public comment on the potential exclusion of high cost areas. As we finalized the economic analysis, we identified high costs associated with the proposed critical habitat designation throughout the range of the Pacific Coast WSP. Costs related to conservation activities for the proposed Pacific Coast WSP critical habitat pursuant to sections 4, 7, and 10 of the Act are estimated to be \$272.8 to \$645.3 million over the next 20 years on a present value basis. In constant dollars, the draft economic analysis estimates there will be an economic impact of \$514.9 to \$1,22.7 million expressed in constant dollars over the next 20 years. The activities affected by plover conservation may include recreation, plover management, real estate development, military base operations, and gravel extraction. Ninety percent of all future costs are associated with 8 central and southern California units identified above (Table 3). On the basis of the significance of these costs, we determined that these warrant exclusion from designation.

*(1) Benefits to Inclusion of the Six Excluded Units or Subunits*

The primary benefit of including an area within a critical habitat designation is the protection provided by section 7(a)(2) of the Act that directs Federal agencies to ensure that their actions do not result in the destruction or adverse modification of critical habitat. The designation of critical habitat may provide a different level of protection under section 7(a)(2) of the Act for the Pacific Coast WSP that is separate from the obligation of a Federal agency to ensure that their actions are not likely to jeopardize the continued existence of the endangered species. Under the *Gifford Pinchot* decision, critical habitat designations may provide greater benefits to the recovery of a species than was previously believed, but it is not possible to quantify this benefit at present. However, the protection

provided is still a limitation on the harm that occurs as opposed to a requirement to provide a conservation benefit.

The area excluded as critical habitat is currently occupied by the species. If this area were designated as critical habitat, any actions with a Federal nexus which might adversely affect the critical habitat would require a consultation with us, as explained previously, in Effects of Critical Habitat Designation section. However, inasmuch as this area is currently occupied by the species, consultation for Federal activities which might adversely impact the species or would result in take would be required even without the critical habitat designation. Primary constituent elements in this area would be protected from destruction or adverse modification by federal actions using a conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot*. This requirement would be in addition to the requirement that proposed Federal actions avoid likely jeopardy to the species' continued existence. However, as all six units are occupied by the Pacific Coast WSP, consultation for activities which may adversely affect the species, including possibly significant habitat modification (see definition of "harm" at 50 CFR 17.3), would be required, even without the critical habitat designation. The requirement to conduct such consultation would occur regardless of whether the authorization for incidental take occurs under either section 7 or section 10 of the Act.

We determined, however, in the economic analysis that designation of critical habitat could result in up to \$645.3 million in costs, the majority of which are related to recreational and tourism impacts. We believe that the potential decrease in coastal recreation and associated tourism resulting from this designation of critical habitat for the Pacific Coast WSP, would minimize impacts to and potentially provide some protection to the species, the sandy

beach, river gravel bar, and evaporation pond habitats where they reside, and the physical and biological features essential to the species' conservation (*i.e.*, the primary constituent elements). Thus, this decrease in recreation and tourism would directly translate into a potential benefit to the species that would result from this designation.

Another possible benefit of a critical habitat designation is education of landowners and the public regarding the potential conservation value of these areas. This may focus and contribute to conservation efforts by other parties by clearly delineating areas of high conservation values for certain species. However, we believe that this education benefit has largely been achieved, or is being achieved in equal measure by other means. Although we have not completed the recovery planning process for the Pacific Coast WSP, the designation of critical habitat would assist in the identification of potential core recovery areas for the species. The critical habitat designation and the current draft recovery plan provide information geared to the general public, landowners, and agencies about areas that are important for the conservation of the species and what actions they can implement to further the conservation of the Pacific Coast WSP within their own jurisdiction and capabilities, and contains provisions for ongoing public outreach and education as part of the recovery process.

In summary, we believe that inclusion of the six subunits as critical habitat would provide some additional Federal regulatory benefits for the species. However, that benefit is limited to some degree by the fact that the designated critical habitat is occupied by the species, and therefore there must, in any case, be consultation with the Service over any Federal action which may affect the species in those six units. The additional educational benefits which might arise from critical habitat designation are largely accomplished through the multiple opportunities for public notice and comments which



accompanied the development of this regulation, publicity over the prior litigation, and public outreach associated with the development of the draft and, ultimately, the implementation of the final recovery plan for the Pacific Coast WSP.

*(2) Benefits to Exclusion of the Six Excluded Units or Subunits*

The economic analysis conducted for this proposal estimates that the costs associated with designating these six subunits would be approximately \$645.3 million. Estimated costs would be associated with the Pacific Coast WSP in amounts shown in Table 3 above. By excluding these subunits, some or all of these costs will be avoided.

*(3) Benefits of Exclusion Outweigh the Benefits of Inclusion of the Six Units or Subunits*

We believe that the benefits from excluding these lands from the designation of critical habitat—avoiding the potential economic and human costs, both in dollars and jobs, predicted in the economic analysis—exceed the educational and regulatory benefits which could result from including those lands in this designation of critical habitat.

We have evaluated and considered the potential economic costs on the recreation and tourism industry relative to the potential benefit for the Pacific Coast WSP and its primary constituent elements derived from the designation of critical habitat. We believe that the potential economic impact of up to approximately \$645.3 million on the tourism industry significantly outweighs the potential conservation and protective benefits for the species and their primary constituent elements derived from the residential development not being constructed as a result of this designation.

We also believe that excluding these lands, and thus helping landowners avoid the additional costs that would result from the designation, will contribute to a more positive climate for Habitat Conservation Plans and other active conservation measures which provide greater conservation benefits than would result from designation of critical habitat “even in the post-Gifford Pinchot environment—which requires only that there be no adverse modification resulting from actions with a Federal nexus. We therefore find that the benefits of excluding these areas from this designation of critical habitat outweigh the benefits of including them in the designation.

We believe that the required future recovery planning process would provide at least equivalent value to the public, State and local governments, scientific organizations, and Federal agencies in providing information about habitat that contains those features considered essential to the conservation of the Pacific Coast WSP, and in facilitating conservation efforts through heightened public awareness of the plight of the listed species. The draft recovery plan contains explicit objectives for ongoing public education, outreach, and collaboration at local, state, and federal levels, and between the private and public sectors, in recovering the Pacific Coast WSP.

*(4) Exclusion Will Not Result in Extinction of the Species*

We believe that exclusion of these lands will not result in the extinction of the Pacific Coast WSP as these areas are considered occupied habitat. Actions which might adversely affect the species are expected to have a Federal nexus, and would thus undergo a section 7 consultation with the Service. The jeopardy standard of section 7, and routine implementation of habitat preservation through the section 7 process, as discussed in the economic analysis, provide assurance that the species will not go extinct. In addition, the species is protected from take under section 9 of the Act. The exclusion leaves these protections unchanged from those that would exist if the excluded areas were designated as critical habitat.

Critical habitat is being designated for the species in other areas that will be accorded the protection from adverse modification by Federal actions using the conservation standard based on the Ninth Circuit decision in *Gifford Pinchot*. Additionally, the species occurs on lands protected and managed either explicitly for the species, or indirectly through more general objectives to protect natural values, this provides protection from extinction while conservation measures are being implemented. For example, the Pacific Coast WSP is protected on lands such as State and National Parks, and are managed specifically for the species *e.g.*, Point Reyes National Seashore. The species also occurs on lands managed to protect and enhance coastal ecosystems and wetlands, *e.g.* Moss Landing Wildlife Area and the San Francisco Bay National Wildlife Refuge Complex.

We believe that exclusion of the six subunits will not result in extinction of the Pacific Coast WSP as they are considered occupied habitat. Federal Actions which might adversely affect

the species would thus undergo a consultation with the Service under the requirements of section 7 of the Act. The jeopardy standard of section 7, and routine implementation of habitat preservation as part of the section 7 process, as discussed in the draft economic analysis, provide insurance that the species will not go extinct. The exclusion leaves these protections unchanged from those that would exist if the excluded areas were designated as critical habitat.

Critical habitat is being designated for the Pacific Coast WSP in other areas that will be accorded the protection from adverse modification by federal actions using the conservation standard based on the Ninth Circuit decision in *Gifford Pinchot*. Additionally, the species occurs on lands protected and managed either explicitly for the species, or indirectly through more general objectives to protect natural values, this factor acting in concert with the other protections provided under the Act for these lands absent designation of critical habitat on them, and acting in concert with protections afforded each species by the remaining critical habitat designation for the species, lead us to find that exclusion of these six subunits will not result in extinction of the Pacific Coast WSP.

*Economic Analysis*

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial information available and to consider the economic and other relevant impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of Specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when such exclusion will result in the extinction of the species concerned.

Following the publication of the proposed critical habitat designation, we conducted an economic analysis to estimate the potential economic effect of the designation. The draft analysis was made available for public review on August 16, 2005 (70 FR 48094). We accepted comments on the draft analysis until September 15, 2005.

The primary purpose of the economic analysis is to estimate the potential economic impacts associated with the designation of critical habitat for the Pacific Coast WSP. This information is intended to assist the Secretary in making decisions about whether the benefits of excluding particular areas from the designation outweigh the



benefits of including those areas in the designation. This economic analysis considers the economic efficiency effects that may result from the designation, including habitat protections that may be co-extensive with the listing of the species. It also addresses distribution of impacts, including an assessment of the potential effects on small entities and the energy industry. This information can be used by the Secretary to assess whether the effects of the designation might unduly burden a particular group or economic sector.

This analysis focuses on the direct and indirect costs of the rule. However, economic impacts to land use activities can exist in the absence of critical habitat. These impacts may result from, for example, local zoning laws, State and natural resource laws, and enforceable management plans and best management practices applied by other State and Federal agencies. Economic impacts that result from these types of protections are not included in the analysis as they are considered to be part of the regulatory and policy baseline.

A copy of the final economic analysis with supporting documents are included in our administrative record and may be obtained by contacting U.S. Fish and Wildlife Service, Branch of Endangered Species (see **ADDRESSES** section) or for downloading from the Internet at <http://www.fws.gov/pacific/sacramento/default.htm>.

#### *Clarity of the Rule*

Executive Order 12866 requires each agency to write regulations and notices that are easy to understand. We invite your comments on how to make this final rule easier to understand, including answers to questions such as the following: (1) Are the requirements in the final rule clearly stated? (2) Does the final rule contain technical jargon that interferes with the clarity? (3) Does the format of the final rule (grouping and order of the sections, use of headings, paragraphing, and so forth) aid or reduce its clarity? (4) Is the description of the notice in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the final rule? (5) What else could we do to make this final rule easier to understand?

Send a copy of any comments on how we could make this final rule easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street, NW., Washington, DC 20240. You may e-mail your comments to this address: [Exsec@ios.doi.gov](mailto:Exsec@ios.doi.gov).

## **Required Determinations**

### *Regulatory Planning and Review*

In accordance with Executive Order 12866, this document is a significant rule in that it may raise novel legal and policy issues, but it is not anticipated to have an annual effect on the economy of \$100 million or more or adversely affect the economy in a material way. Due to the timeline for publication in the **Federal Register**, the Office of Management and Budget (OMB) has not formally reviewed this rule. As explained above, we prepared an economic analysis of this action. We used this analysis to meet the requirement of section 4(b)(2) of the Act to determine the economic consequences of designating the specific areas as critical habitat. We also used it to help determine whether to exclude specific areas as critical habitat, as provided for under section 4(b)(2), if we determine that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless we determine, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species.

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

Under the Regulatory Flexibility Act (RFA) (as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), 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 effects of the rule on small entities (*i.e.*, small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA also amended the RFA to require a certification statement.

Small entities include small organizations, such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; as well as small businesses. 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 consider the types of activities that might trigger regulatory impacts under this rule, as well as the types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small business firm's business operations.

To determine if the rule could significantly affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities (*e.g.*, housing development, grazing, oil and gas production, timber harvesting). 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 conducted, funded, or permitted by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they fund, permit, or implement that may affect Pacific Coast WSP. 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.

To determine if the proposed designation of critical habitat for the Pacific coast population of the western snowy plover would affect a substantial number of small entities, we considered the number of small entities affected within particular types of economic activities (e.g., recreation, residential and related development, and commercial gravel mining). We considered each industry or category individually to determine if certification is appropriate. In estimating the numbers of small entities potentially affected, we also considered whether their activities have any Federal involvement; some kinds of activities are unlikely to have any Federal involvement and so will not be affected by the designation of critical habitat. Designation of critical habitat only affects activities conducted, funded, permitted or authorized by Federal agencies; non-Federal activities are not affected by the designation.

In our economic analysis of this proposed designation, we evaluated the potential economic effects on small business entities and small governments resulting from conservation actions related to the listing of this species and proposed designation of its critical habitat. We evaluated small business entities in five categories: Habitat and plover management activities, beach-related recreation activities, residential and related development, activities on military lands, and commercial mining. Of these five categories, impacts of plover conservation to habitat and plover management, and activities on military lands are not anticipated to affect small entities as discussed in Appendix A of our draft economic analysis. The following summary of the information contained in Appendix A of the draft economic analysis provides the basis for our determination.

On the basis of our analysis of western snowy plover conservation measures, we determined that this designation of critical habitat for the western snowy plover would result in potential economic effects to recreation. Section 4 of the draft economic analysis discusses impacts of restrictions on recreational activity at beaches containing potential critical habitat for the plover. Individual recreators may experience welfare losses as a result of foregone or diminished trips to the beach. If fewer trips are taken by recreators, then some local businesses serving these visitors may be indirectly affected. In our August 16, 2005, notice of availability on the draft economic analysis and proposed rule (70 FR

48094), we did not believe that this proposed designation would have an effect on a substantial number of small businesses and would also not result in a significant effect to impacted small businesses. In this final rule, we have excluded 8 units (Vandenberg South (CA 17B), Atascadero Beach (CA 15B), Vandenberg North (CA 17A), Silver Strand (CA 27C), Jetty Road to Aptos (CA 12A), Morro Bay Beach (CA 15C), Pismo Beach/Nipomo (CA 16), and Monterey to Moss Landing (CA 12C)) that contained approximately 90 percent of the economic impacts of the proposed designation; approximately 95 percent of the economic impacts are due to impacts to recreations. Because we have excluded these 8 units, this further confirms that this designation will not have an effect on a substantial number of small businesses and would also not result in a significant effect to impacted small businesses.

For development activities, a detailed analysis of impacts to these activities is presented in Section 5 of the draft economic analysis. For this analysis, we determined that two development projects occurring within the potential critical habitat are expected to incur costs associated with plover conservation efforts. One of these projects is funded by Humboldt County, which does not qualify as a small government, and is therefore not relevant to this small business analysis. The economic impact to the one project that qualifies as a small business is estimated to be 2.5 percent of the tax revenue. Because only one small business is estimated to be impacted by this proposal and only 2.5 percent of revenues are estimated to be incurred, we have determined that this designation will not have an effect on a substantial number of small businesses.

For gravel mining activities, we have determined that five gravel mining companies exist within Unit CA-4D of the proposed designation of critical habitat. We determined that the annualized impact from plover conservation activities to these small businesses was approximately 0.5 percent of the total sales of these five mining companies. From this analysis, we have determined that this designation would also not result in a significant effect to the annual sales of these small businesses impacted by this designation.

Based on this data we have determined that this final designation would not affect a substantial number of small businesses involved in recreation, residential and related development and commercial gravel mining. Further, we have determined that this final

designation would also not result in a significant effect to the annual sales of those small businesses impacted by this designation. As such, we are certifying that this final designation of critical habitat would not result in a significant economic impact on a substantial number of small entities. Please refer to Appendix A of our economic analysis of this designation for a more detailed discussion of potential economic impacts to small business entities.

In general, two different mechanisms in section 7 consultations could lead to additional regulatory requirements for the approximately four small businesses, on average, that may be required to consult with us each year regarding their project's impact on Pacific Coast WSP and its habitat. First, if we conclude, in a biological opinion, that a proposed action is likely to jeopardize the continued existence of a species or adversely modify its critical habitat, we can offer "reasonable and prudent alternatives." Reasonable and prudent alternatives are alternative actions that can be implemented in a manner consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid jeopardizing the continued existence of listed species or result in adverse modification of critical habitat. A Federal agency and an applicant may elect to implement a reasonable and prudent alternative associated with a biological opinion that has found jeopardy or adverse modification of critical habitat. An agency or applicant could alternatively choose to seek an exemption from the requirements of the Act or proceed without implementing the reasonable and prudent alternative. However, unless an exemption were obtained, the Federal agency or applicant would be at risk of violating section 7(a)(2) of the Act if it chose to proceed without implementing the reasonable and prudent alternatives.

Second, if we find that a proposed action is not likely to jeopardize the continued existence of a listed animal or plant species, we may identify reasonable and prudent measures designed to minimize the amount or extent of take and require the Federal agency or applicant to implement such measures through non-discretionary terms and conditions. We may also identify discretionary conservation recommendations designed to minimize or avoid the adverse effects of a proposed action on listed species or critical habitat, help implement recovery plans, or to develop information that could contribute to the recovery of the species.



Based on our experience with consultations pursuant to section 7 of the Act for all listed species, virtually all projects—including those that, in their initial proposed form, would result in jeopardy or adverse modification determinations in section 7 consultations—can be implemented successfully with, at most, the adoption of reasonable and prudent alternatives. These measures, by definition, must be economically feasible and within the scope of authority of the Federal agency involved in the consultation. We can only describe the general kinds of actions that may be identified in future reasonable and prudent alternatives. These are based on our understanding of the needs of the species and the threats it faces, as described in the final listing rule and this critical habitat designation. Within the final CHUs, the types of Federal actions or authorized activities that we have identified as potential concerns are:

(1) Actions and management efforts affecting Pacific Coast WSP on Federal lands such as national seashores, parks, and wildlife reserves;

(2) Dredging and dredge spoil placement activities that permanently remove PCEs to the extent that essential biological function of plover habitat is adversely affected;

(3) Construction and maintenance of eroded areas or structures (*e.g.*, roads, walkways, marinas, salt ponds, access points, bridges, culverts) which interfere with plover nesting, breeding, or foraging; produce increases in predation; or promote a dense growth of vegetation that precludes an area's use by plovers;

(4) Stormwater and wastewater discharge from communities; and,

(5) Flood control actions that change the PCEs to the extent that the habitat no longer contributes to the conservation of the species.

It is likely that a developer or other project proponent could modify a project or take measures to protect Pacific Coast WSP. The kinds of actions that may be included if future reasonable and prudent alternatives become necessary include conservation set-asides, predator reduction activities, symbolic fencing to reduce human impacts to breeding areas, management of nonnative species, restoration of degraded habitat, and regular monitoring. These are based on our understanding of the needs of the species and the threats it faces, as described in the final listing rule and proposed critical habitat designation. These measures are not likely to result in a significant economic impact to project proponents.

In summary, we have considered whether this would result in a significant economic effect on a substantial number of small entities. We have determined, for the above reasons and based on currently available information, that it is not likely to affect a substantial number of small entities. Federal involvement, and thus section 7 consultations, would be limited to a subset of the area designated. The most likely Federal involvement could include Corps permits, permits we may issue under section 10(a)(1)(B) of the Act, FHA funding for road improvements, and regulation of recreation by the Park Service and BLM. A regulatory flexibility analysis is not required.

#### *Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 802(2))*

Under the SBREFA, this rule is not a major rule. Our detailed assessment of the economic effects of this designation is described in the economic analysis. Based on the effects identified in the economic analysis, we determined that this rule will not have an annual effect on the economy of \$100 million or more, will not cause a major increase in costs or prices for consumers, and will not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. Refer to the final economic analysis for a discussion of the effects of this determination.

#### *Executive Order 13211*

On May 18, 2001, the President issued Executive Order 13211 on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This final rule to designated critical habitat for the Pacific Coast WSP is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

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

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

(a) 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, tribal governments, or the private sector

and includes both "Federal intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or Tribal governments" with two exceptions. It excludes "a condition of Federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and Tribal governments under entitlement authority, "if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding" and the State, local, or tribal governments "lack authority" to adjust accordingly. (At the time of enactment, these entitlement programs were: Medicaid; AFDC 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."

(b) The economic analysis discusses potential impacts of critical habitat designation for the western snowy plover including administrative costs, water management activities, oil and gas activities, concentrated animal feeding operations, agriculture, and transportation. The analysis estimates that costs of the rule could range from \$272.8 to \$645.3 million over the next 20 years. In constant dollars, the draft economic analysis estimates there will be an economic impact of \$514.9 to \$1,222.7 million over the next 20 years. In this final rule, we have excluded 8 units (Vandenberg South (CA 17B), Atascadero Beach (CA 15B), Vandenberg North (CA 17A), Silver Strand (CA 27C), Jetty Road to Aptos (CA 12A), Morro Bay Beach (CA 15C), Pismo Beach/Nipomo (CA 16), and Monterey to Moss Landing (CA 12C)) that contained approximately 90 percent of the economic impacts of the proposed designation. Recreational activities are expected to experience the greatest economic impacts related to western snowy plover conservation activities,



although those impacts are going to be greatly diminished as a result of our exclusions pursuant to section 4(b)(2) of the Act. Impacts on small governments are not anticipated. Furthermore, any costs to recreators would not be expected to be passed on to entities that qualify as small governments. Consequently, for the reasons discussed above, we do not believe that the designation of critical habitat for the western snowy plover will significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

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 who receive Federal funding, assistance, permits, or 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.

(b) Due to current public knowledge of the species' protection, the prohibition against take of the species both within and outside of the designated areas, and the fact that critical habitat provides no incremental restrictions, we do not anticipate that this rule will significantly or uniquely affect small governments. As such, Small Government Agency Plan is not required. We will, however, further evaluate this issue as we conduct our economic analysis and revise this assessment if appropriate.

#### *Federalism*

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

in California, Oregon and Washington. The designation of critical habitat in areas currently occupied by the Pacific Coast WSP habitat imposes no additional restrictions to those currently in place and, therefore, has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat necessary to the survival of the species are specifically identified. While making this definition and identification does not alter where and what federally sponsored activities may occur, it may assist these local governments in long-range planning (rather than waiting for case-by-case section 7 consultations to occur).

#### *Civil Justice Reform*

In accordance with Executive Order 12988, the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. This proposed rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs of the Pacific Coast WSP.

#### *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. 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*

It is our position that, outside the Tenth Circuit, we do not need to prepare environmental analyses as defined by the 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 assertion was upheld in the courts of the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. Ore. 1995), cert. denied 116 S. Ct. 698 (1996)). This final

determination does not constitute a major Federal action significantly affecting the quality of the human environment.

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

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951), Executive Order 13175, and the Department of Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. We have determined that there are no tribal lands essential for the conservation of the Pacific Coast WSP. Therefore, designation of critical habitat for the Pacific Coast WSP has not been designated on Tribal lands.

#### **References Cited**

A complete list of all references cited in this rulemaking is available upon request from the Field Supervisor, Arcata Fish and Wildlife Office (see **ADDRESSES** section).

#### **Author(s)**

The primary author of this package is the Arcata Fish and Wildlife Office staff (see **ADDRESSES** 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 § 17.95(b), revise the entry for "Western Snowy Plover (*Charadrius alexandrinus nivosus*)—Pacific coast population" to read as follows:

#### **§ 17.95 Critical habitat—fish and wildlife.**

\* \* \* \* \*

(b) *Birds.*

\* \* \* \* \*



Western Snowy Plover (*Charadrius alexandrinus nivosus*)—Pacific Coast Population

(1) Critical habitat units are depicted on the maps below for the following States and counties:

(i) Washington: Grays Harbor and Pacific counties;

(ii) Oregon: Coos, Curry, Douglas, Lane, and Tillamook counties; and

(iii) California: Del Norte, Humboldt, Los Angeles, Marin, Mendocino, Monterey, Orange, San Diego, San Luis Obispo, San Mateo, Santa Barbara, Santa Cruz, and Ventura counties.

(2) The primary constituent elements of critical habitat for the Pacific coast population of western snowy plover are the habitat components that provide:

(i) Sparsely vegetated areas above daily high tides (such as sandy beaches, dune systems immediately inland of an active beach face, salt flats, seasonally exposed gravel bars, dredge spoil sites, artificial salt ponds and adjoining levees) that are relatively undisturbed by the presence of humans, pets, vehicles or human-attracted predators (essential for reproduction, food, shelter from predators, protection from disturbance, and space for growth and normal behavior);

(ii) Sparsely vegetated sandy beach, mud flats, gravel bars or artificial salt

ponds subject to daily tidal inundation, but not currently under water, that support small invertebrates (essential for food); and

(iii) Surf or tide-cast organic debris such as seaweed or driftwood (essential to support small invertebrates for food, and to provide shelter from predators and weather for reproduction).

(3) Critical habitat does not include existing features and structures, such as buildings, paved areas, boat ramps, and other developed areas, not containing one or more of the primary constituent elements. Any such structures that were inside the boundaries of a critical habitat unit at the time it was designated are not critical habitat. The land on which such structures directly sit is also not critical habitat, as long as the structures remain in place.

(4) *Critical habitat map units.* Data layers defining map units were created on a base of USGS 7.5' quadrangles, and critical habitat units were then mapped using Universal Transverse Mercator, North American Datum 1927 (UTM NAD 27) coordinates. These coordinates establish the vertices and endpoints of the landward bounds of the units. Other bounds are established descriptively according to compass headings and the position of the mean low waterline (MLW). For purposes of estimating unit sizes, we approximated MLW in

California using the most recent GIS projection of mean high water (MHW). We chose MHW both because it is the only approximation of the coastline currently available in GIS format. We were unable to obtain recent GIS maps of MHW or MLW for Oregon and Washington; therefore, we approximated MLW for units in those States based on aerial photographs.

(5) *Exclusions from the critical habitat designation.* Certain geographic areas are excluded from the critical habitat designation as described below in this paragraph (5).

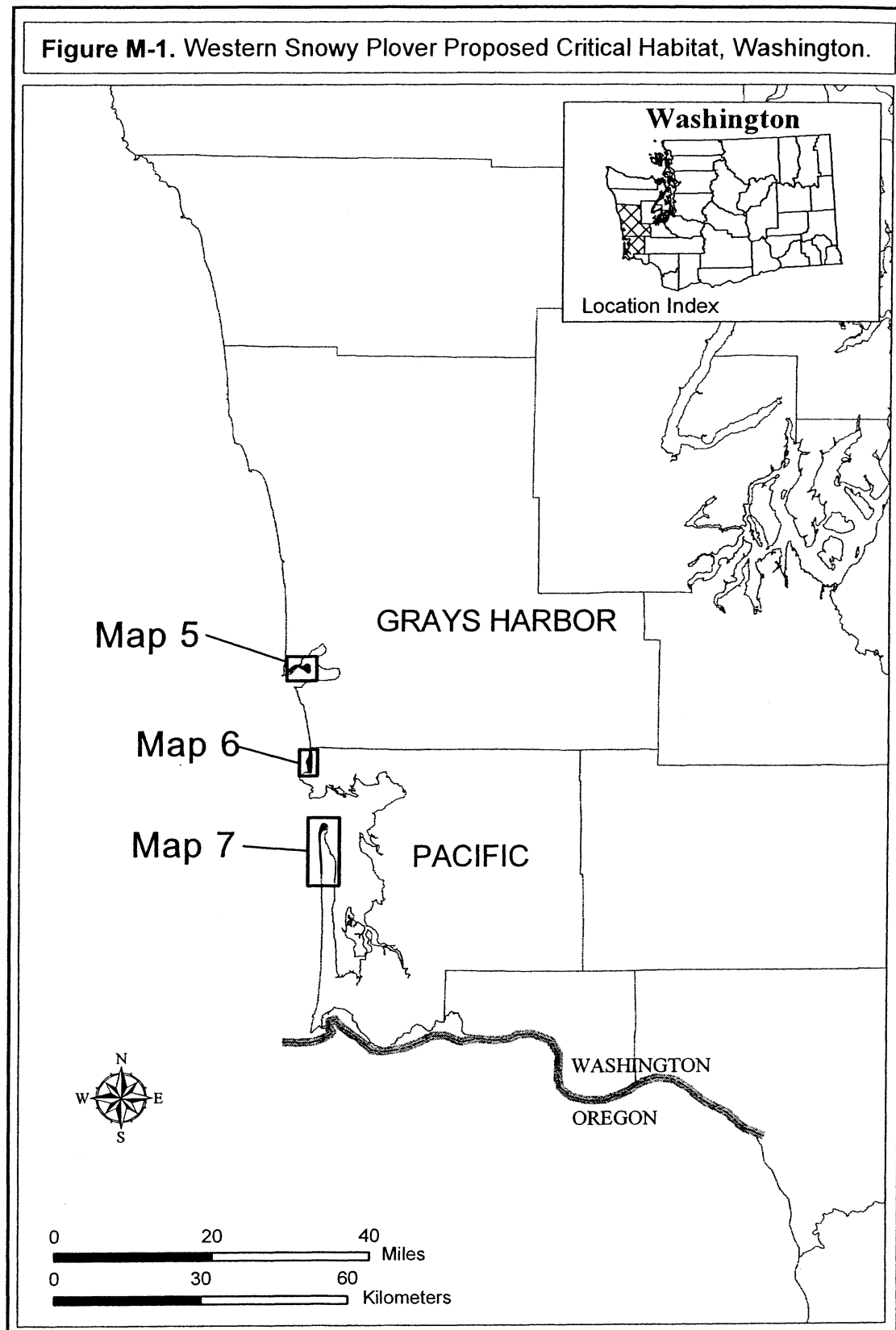
(i) *Exclusions under sections 3(5)(A) and 4(b)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).* Vandenberg Air Force Base, San Diego Multiple Species Conservation Program, six units bordering the south San Francisco Bay totaling 1,847 ac (747.4 ha), Dillon Beach (Unit CA 7), Vandenberg South (CA 17B), Atascadero Beach (CA 15B), Vandenberg North (CA 17A), Silver Strand (CA 27C), Jetty Road to Aptos (CA 12A), Morro Bay Beach (CA 15C), Pismo Beach/Nipomo (CA 16), and Monterey to Moss Landing (CA 12C).

(ii) [Reserved].

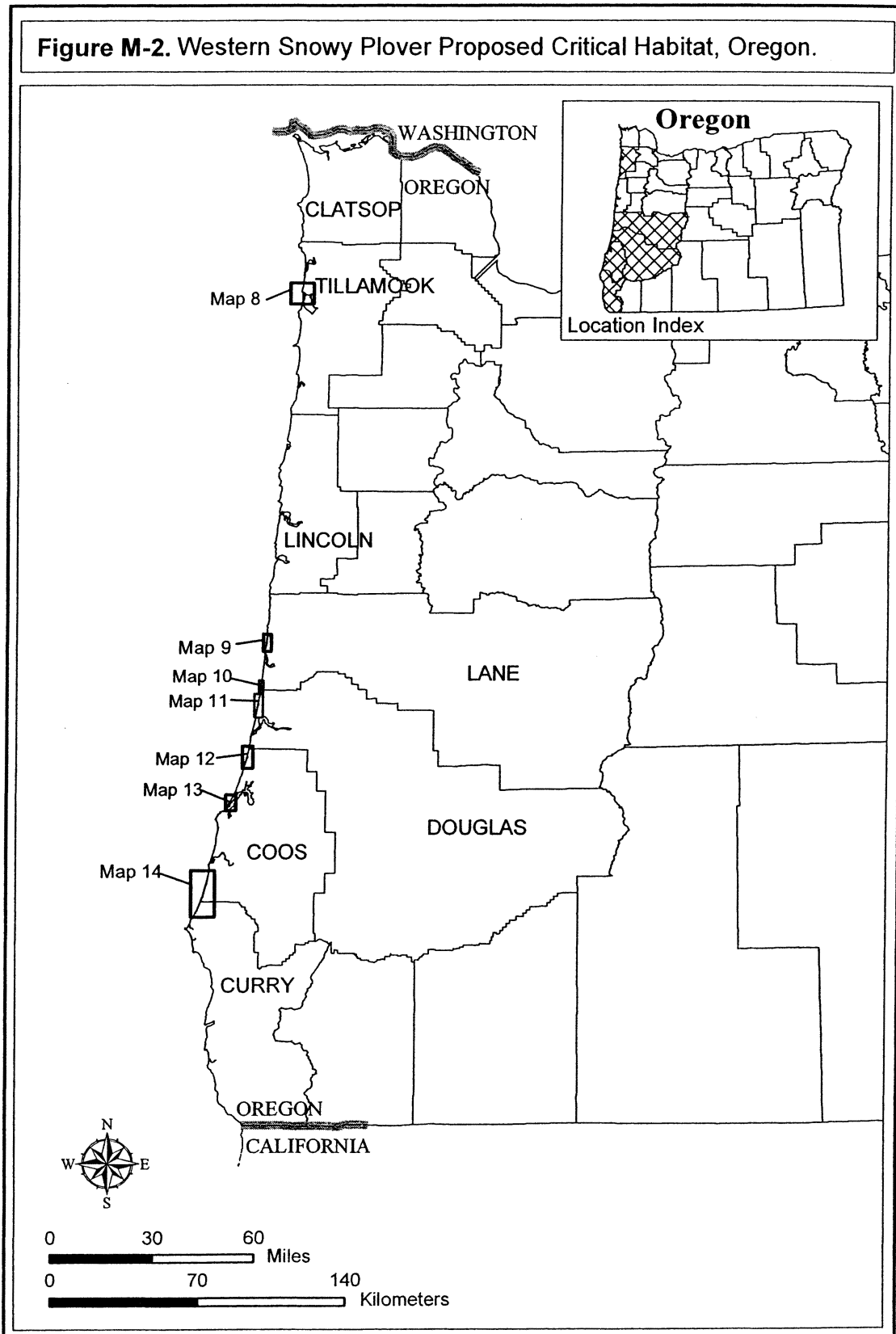
(6) **Note:** Maps M1–M4 (index maps) follow:

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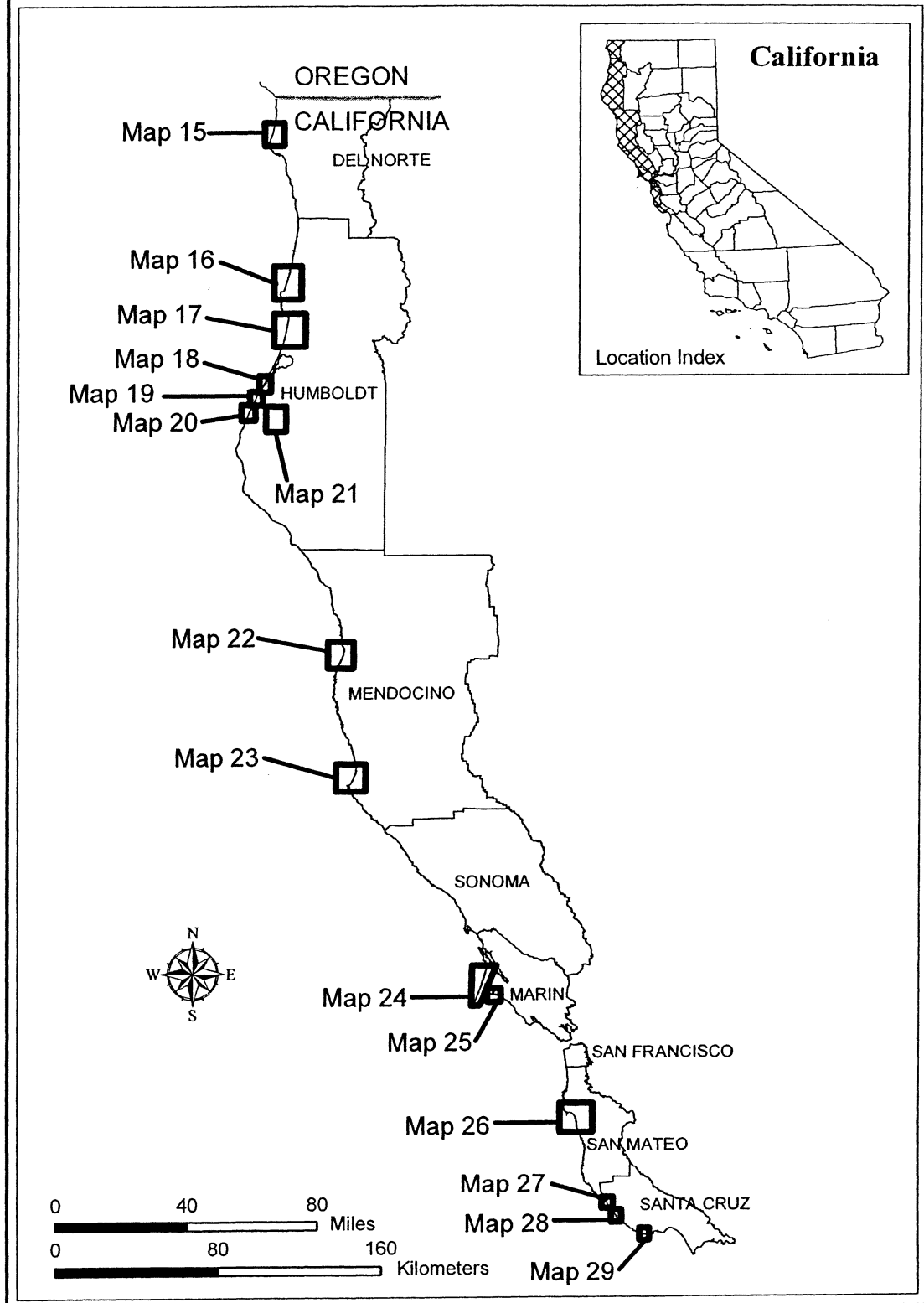




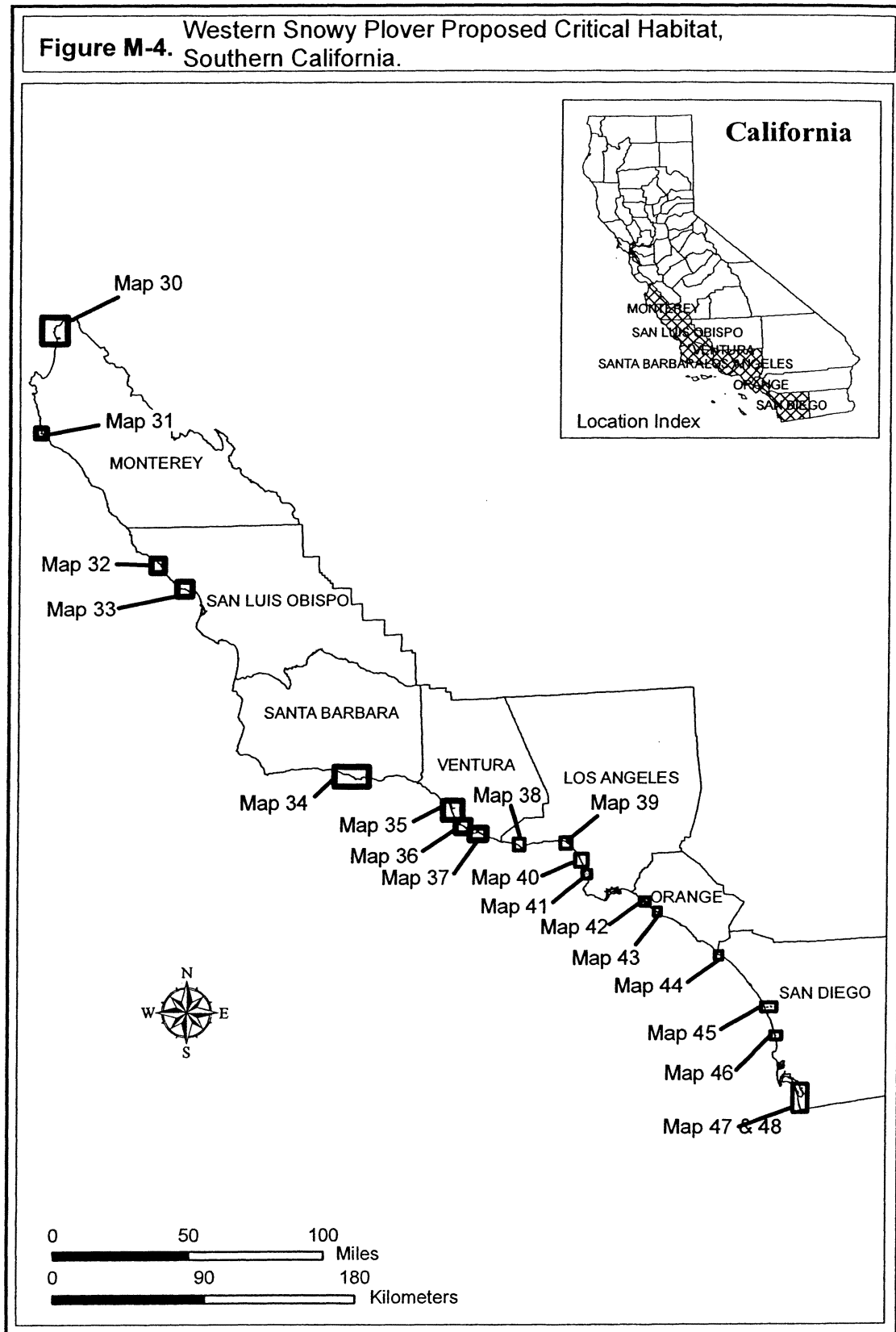




**Figure M-3.** Western Snowy Plover Proposed Critical Habitat,  
Northern California.









(7) Unit WA 2, Gray's Harbor County, Washington.

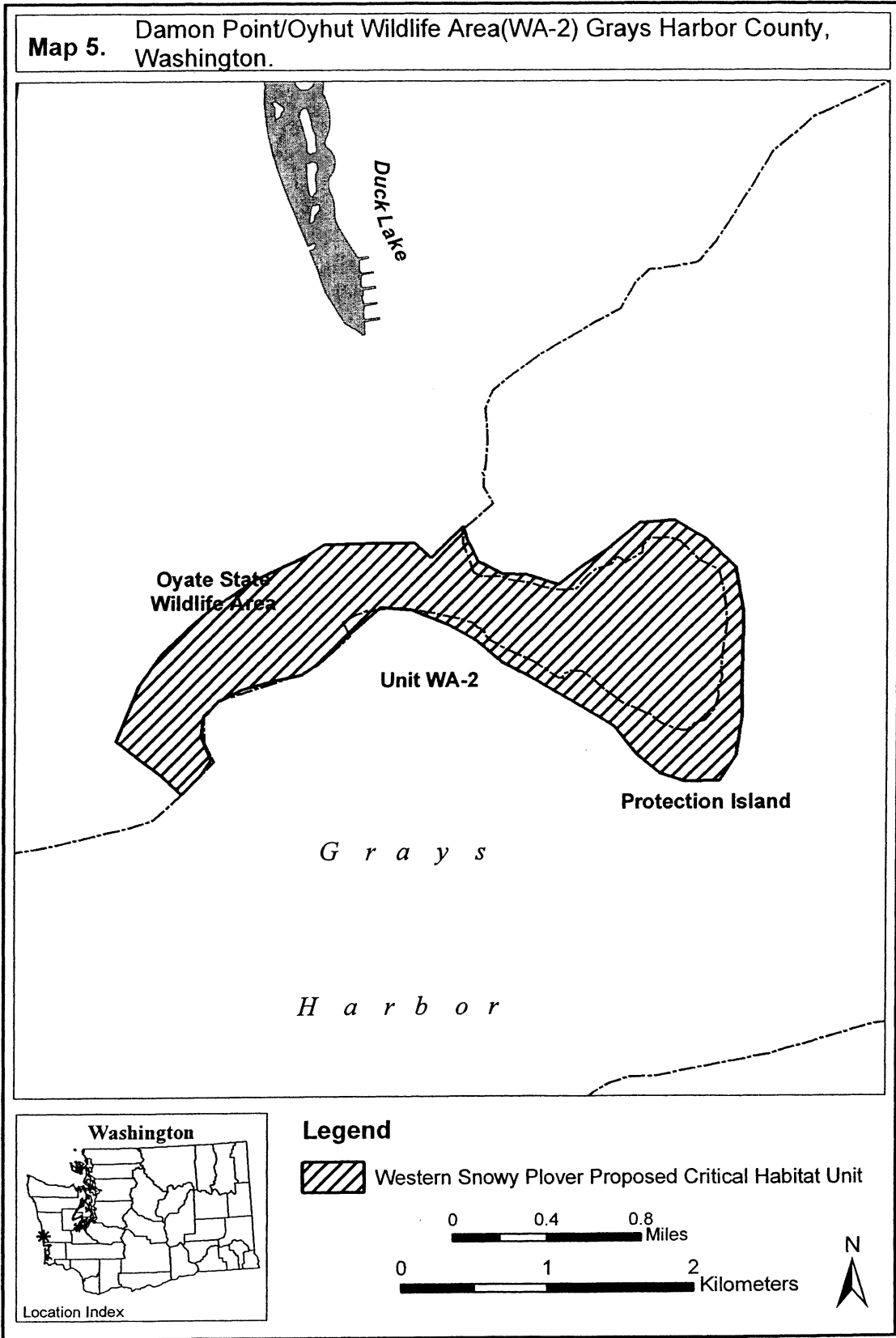
(i) From USGS 1:24,000 quadrangle maps West Port, and Point Brown, Washington, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 411969, 5198743; 412118, 5198955; 412321, 5199143; 412474, 5199276; 412581, 5199342; 412760, 5199464; 412914, 5199534; 413095, 5199617; 413220, 5199696; 413634, 5199705; 413834, 5199702; 413941, 5199606; 414011, 5199668; 414163,

5199815; 414189, 5199727; 414265, 5199581; 414434, 5199496; 414600, 5199488; 414816, 5199423; 414960, 5199536; 415149, 5199660; 415368, 5199839; 415604, 5199856; 415808, 5199733; 416012, 5199539; 416064, 5199233; 416059, 5198892; 416059, 5198535; 416020, 5198256; 415914, 5198083; 415679, 5198078; 415512, 5198134; 415356, 5198262; 415200, 5198457; 414976, 5198591; 414791, 5198696; 414626, 5198794; 414430, 5198897; 414260, 5199040; 414064,

5199151; 413809, 5199254; 413603, 5199268; 413412, 5199107; 413205, 5198905; 413067, 5198813; 412875, 5198772; 412670, 5198713; 412504, 5198634; 412411, 5198529; 412393, 5198396; 412460, 5198236; 412387, 5198123; 412260, 5197998; 412114, 5198138; 411995, 5198227; 411816, 5198366; returning to 411969, 5198743.

(ii) **Note:** Map of Unit WA 2 (Map M5) follows:

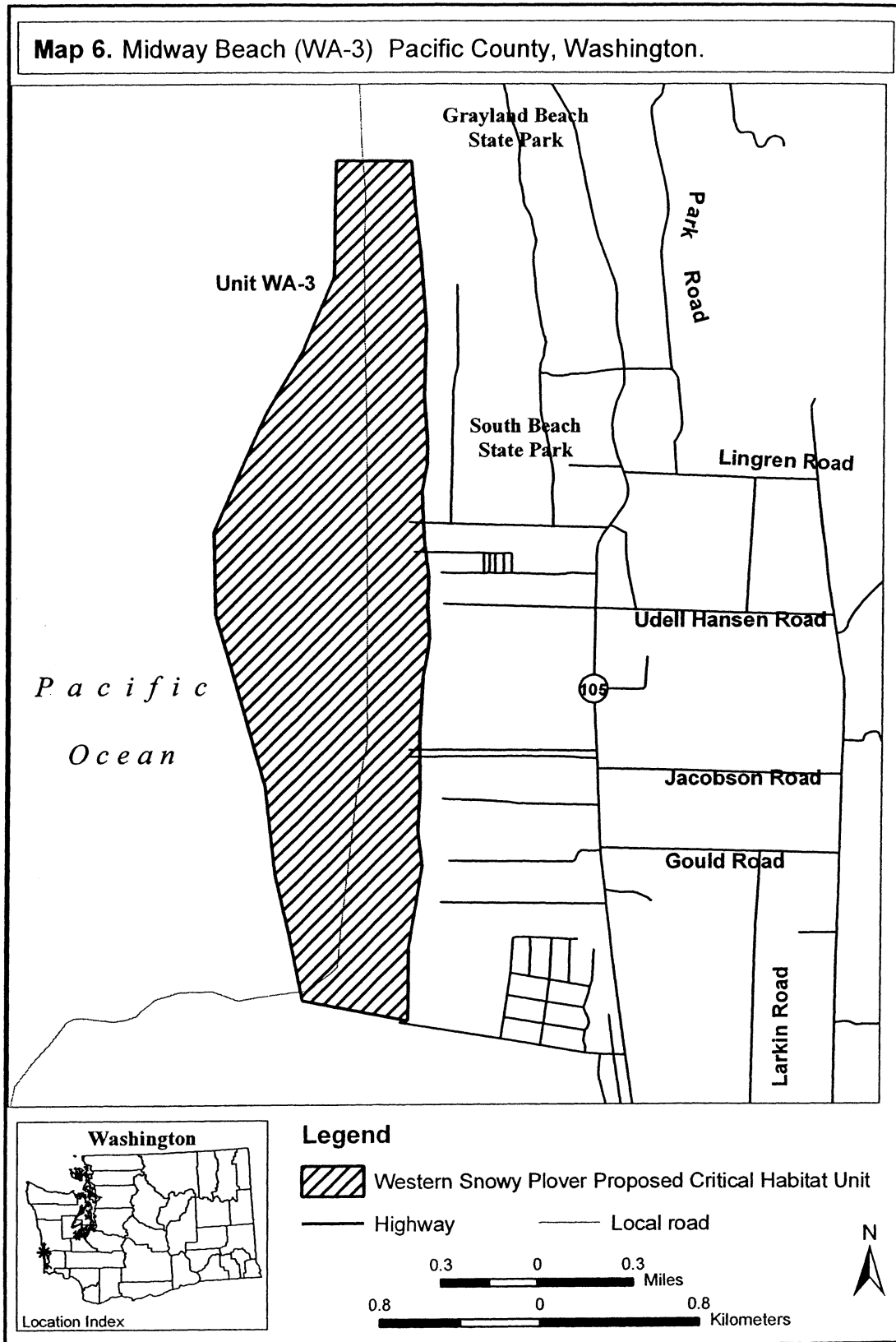






- (8) Unit WA 3, Pacific County, Washington.
- (i) From USGS 1:24,000 quadrangle maps Grayland, and North Cove, Washington, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 416476, 5177381; 415946, 5177482; 415875, 5177830; 415806, 5178119; 415755, 5178555; 415630, 5178985; 415500, 5179419; 415492, 5179835; 415746, 5180411; 415933, 5180734; 416091, 5181113; 416093, 5181429; 416098, 5181688; 416474, 5181685; 416492, 5181483; 416521, 5181242; 416550, 5180859; 416543, 5180507; 416559, 5180293; 416559, 5180171; 416537, 5180035; 416541, 5179894; 416545, 5179798; 416570, 5179614; 416563, 5179469; 416574, 5179293; 416561, 5179199; 416543, 5179101; 416528, 5178820; 416534, 5178526; 416523, 5178330; 416545, 5178157; 416516, 5177956; 416481, 5177740; 416481, 5177511; returning to 416476, 5177381.
- (ii) **Note:** Map of Unit WA 3 (Map M6) follows:







(9) Unit WA 4, Pacific County, Washington.

(i) From USGS 1:24,000 quadrangle maps North Cove, and Oysterville, Washington, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 418747, 5156518; 418673, 5156518; 418673, 5156666; 418617, 5157830; 418525, 5159271; 418433,

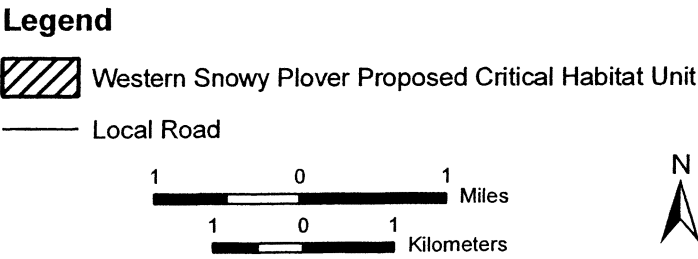
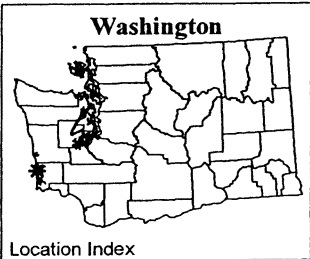
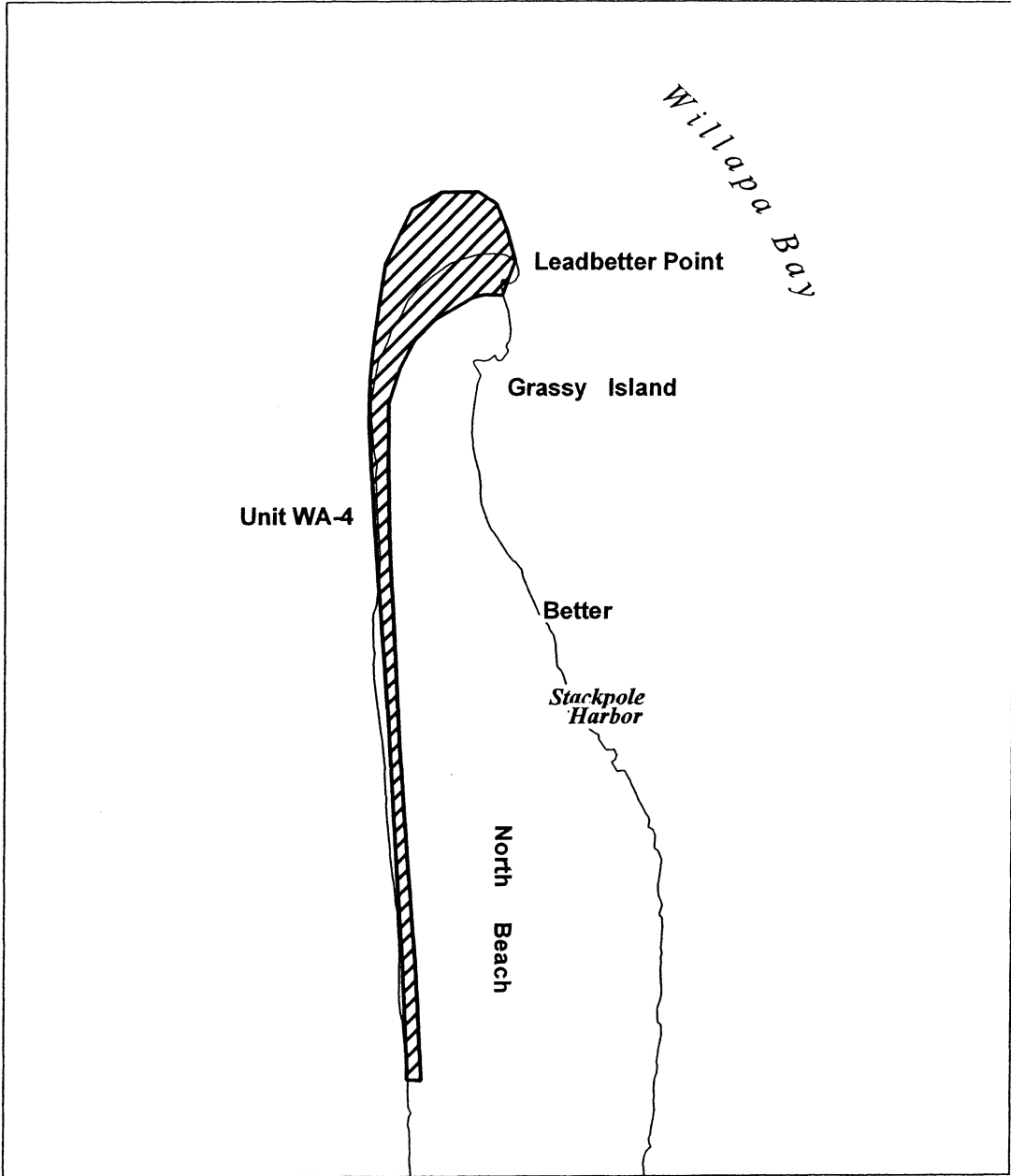
5160860; 418285, 5162689; 418193, 5164185; 418201, 5164730; 418262, 5165289; 418377, 5166088; 418684, 5166723; 419029, 5166925; 419464, 5166919; 419684, 5166777; 419815, 5166467; 419904, 5166114; 419756, 5165718; 419549, 5165726; 419403, 5165688; 419283, 5165618; 418960, 5165433; 418727, 5165193; 418549,

5164867; 418423, 5164456; 418422, 5163778; 418444, 5162761; 418503, 5161719; 418570, 5160431; 418666, 5159127; 418777, 5157778; 418843, 5156510; 418747, 5156518; returning to 418747, 5156518.

(ii) **Note:** Map of Unit WA 4 (Map M7) follows:



**Map 7.** Leadbetter Point/Gunpowder Sands (WA-4) Pacific County, Washington.





(10) Unit OR 3, Tillamook County, Oregon.

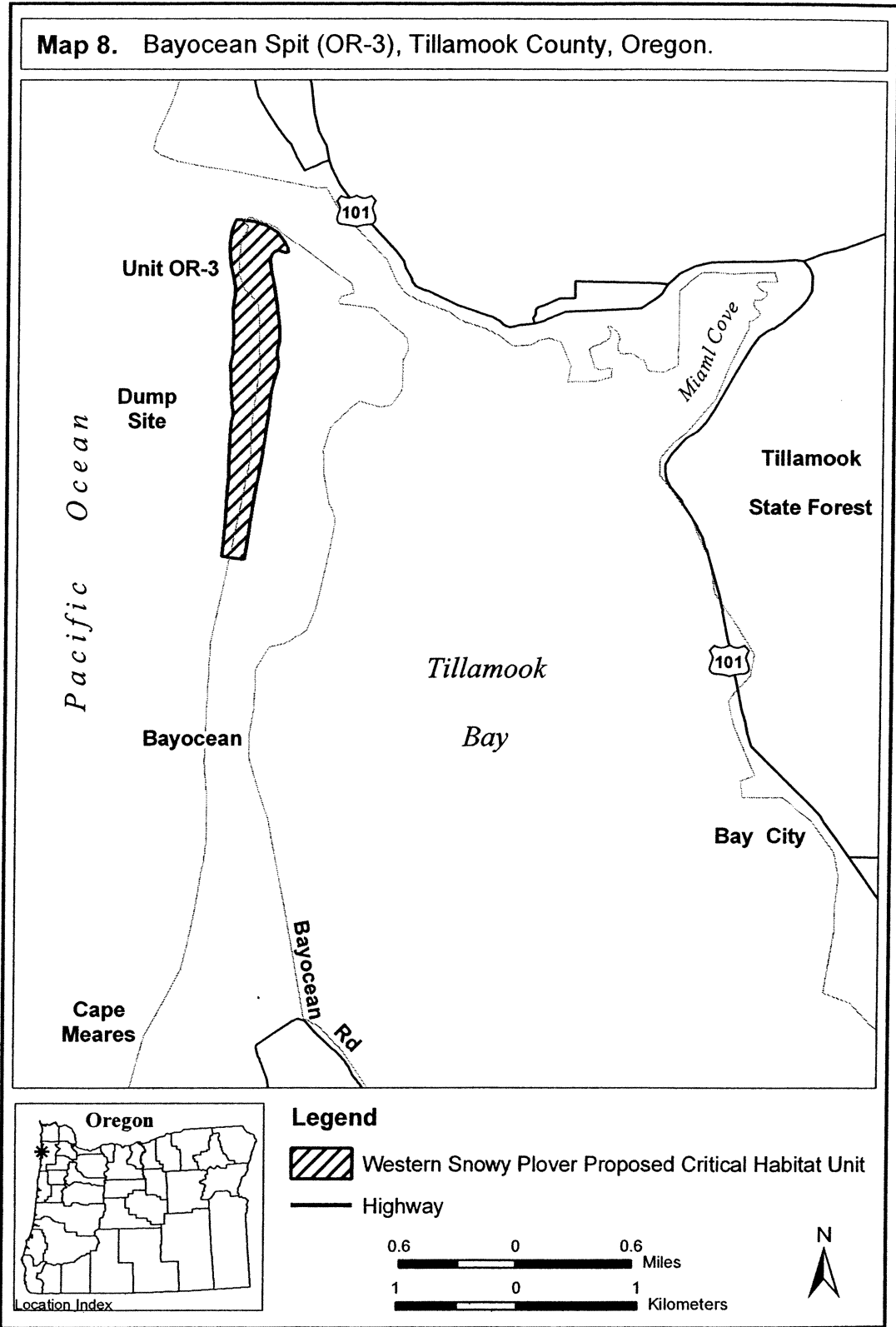
(i) From USGS 1:24,000 quadrangle map Garibaldi, Oregon, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 425807, 5046046; 425855, 5046042; 425953, 5046029; 426052, 5045994; 426095, 5045969; 426142, 5045939; 426175, 5045895; 426208, 5045840; 426224, 5045807;

426227, 5045780; 426208, 5045772; 426184, 5045778; 426149, 5045794; 426122, 5045784; 426098, 5045756; 426081, 5045721; 426091, 5045643; 426120, 5045495; 426128, 5045441; 426159, 5045231; 426167, 5045131; 426167, 5045049; 426151, 5045006; 426143, 5044953; 426151, 5044898; 426159, 5044844; 426124, 5044732; 426104, 5044648; 426078, 5044433;

426052, 5044257; 426020, 5044062; 425972, 5043800; 425889, 5043253; 425718, 5043279; 425706, 5043277, proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 425807, 5046046.

(ii) **Note:** Map of Unit OR 3 (Map M8) follows:







(11) Unit OR 7, Lane County, Oregon.  
(i) From USGS 1:24,000 quadrangle maps Mercer Lake OE W, and Mercer Lake, Oregon, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 410183, 4883959; 410218, 4883951; 410246, 4883955; 410260, 4883947; 410265, 4883920; 410273, 4883864; 410269, 4883809; 410257, 4883747; 410252, 4883652; 410244, 4883585; 410241, 4883515; 410230, 4883391; 410213, 4883323; 410205, 4883270; 410202, 4883221; 410198, 4883167; 410200, 4883104; 410207, 4883029; 410211, 4882970; 410206, 4882928; 410206, 4882870; 410213, 4882806; 410239, 4882738; 410252, 4882699; 410254, 4882655; 410259, 4882615; 410261, 4882590; 410259, 4882532; 410230, 4882501; 410203, 4882470; 410179, 4882445; 410156, 4882418; 410135, 4882388; 410116,

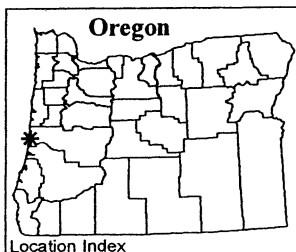
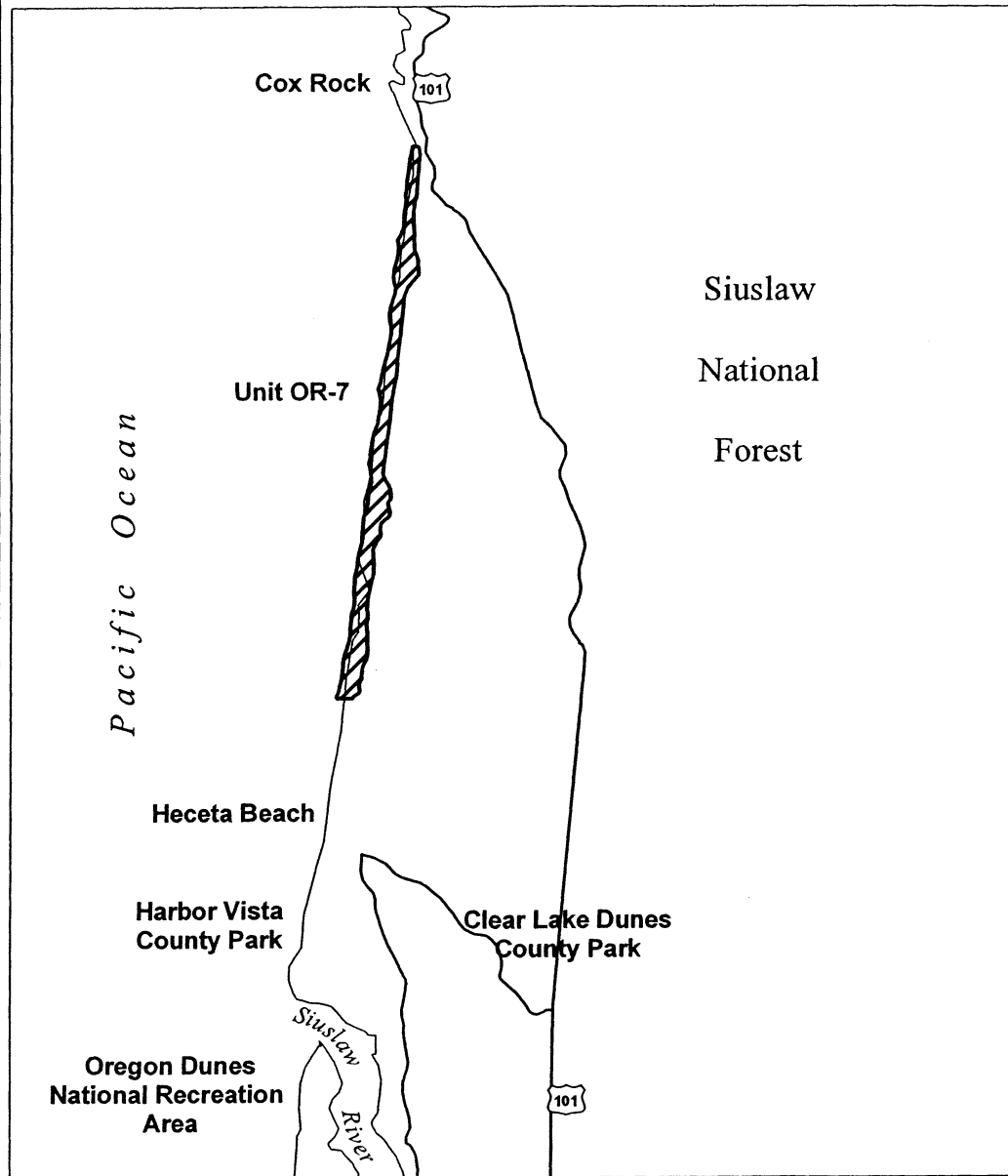
4882344; 410099, 4882271; 410059, 4881847; 410020, 4881553; 410011, 4881367; 409963, 4881129; 409938, 4880858; 409903, 4880597; 409872, 4880368; 409867, 4880331; 409863, 4880299; 409874, 4880271; 409885, 4880244; 409903, 4880212; 409921, 4880180; 409943, 4880130; 409952, 4880094; 409956, 4880050; 409954, 4880012; 409933, 4879992; 409921, 4879973; 409921, 4879955; 409929, 4879927; 409941, 4879890; 409944, 4879863; 409941, 4879833; 409935, 4879815; 409920, 4879804; 409874, 4879770; 409848, 4879743; 409839, 4879717; 409832, 4879667; 409841, 4879634; 409837, 4879601; 409822, 4879571; 409801, 4879536; 409784, 4879508; 409775, 4879488; 409764, 4879474; 409753, 4879444; 409768, 4879273; 409762, 4879169; 409726, 4879017; 409708, 4878913; 409692,

4878839; 409682, 4878765; 409698, 4878740; 409696, 4878733; 409699, 4878717; 409701, 4878694; 409696, 4878656; 409687, 4878598; 409692, 4878500; 409693, 4878433; 409699, 4878296; 409699, 4878270; 409695, 4878244; 409682, 4878211; 409665, 4878174; 409645, 4878126; 409639, 4878088; 409638, 4878061; 409631, 4878025; 409629, 4877989; 409615, 4877967; 409609, 4877942; 409604, 4877919; 409604, 4877895; 409613, 4877852; 409597, 4877832; 409549, 4877801; 409529, 4877773; 409450, 4877776; 409382, 4877775; 409347, 4877775; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 410183, 4883959.

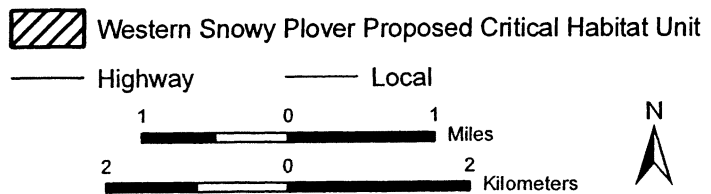
(ii) **Note:** Map of Unit OR 7 (Map M9) follows:



**Map 9. Sutton/Baker Beaches (OR-7), Lane County, Oregon.**



**Legend**





(12) Unit OR 8A, Lane County and Douglas County, Oregon.

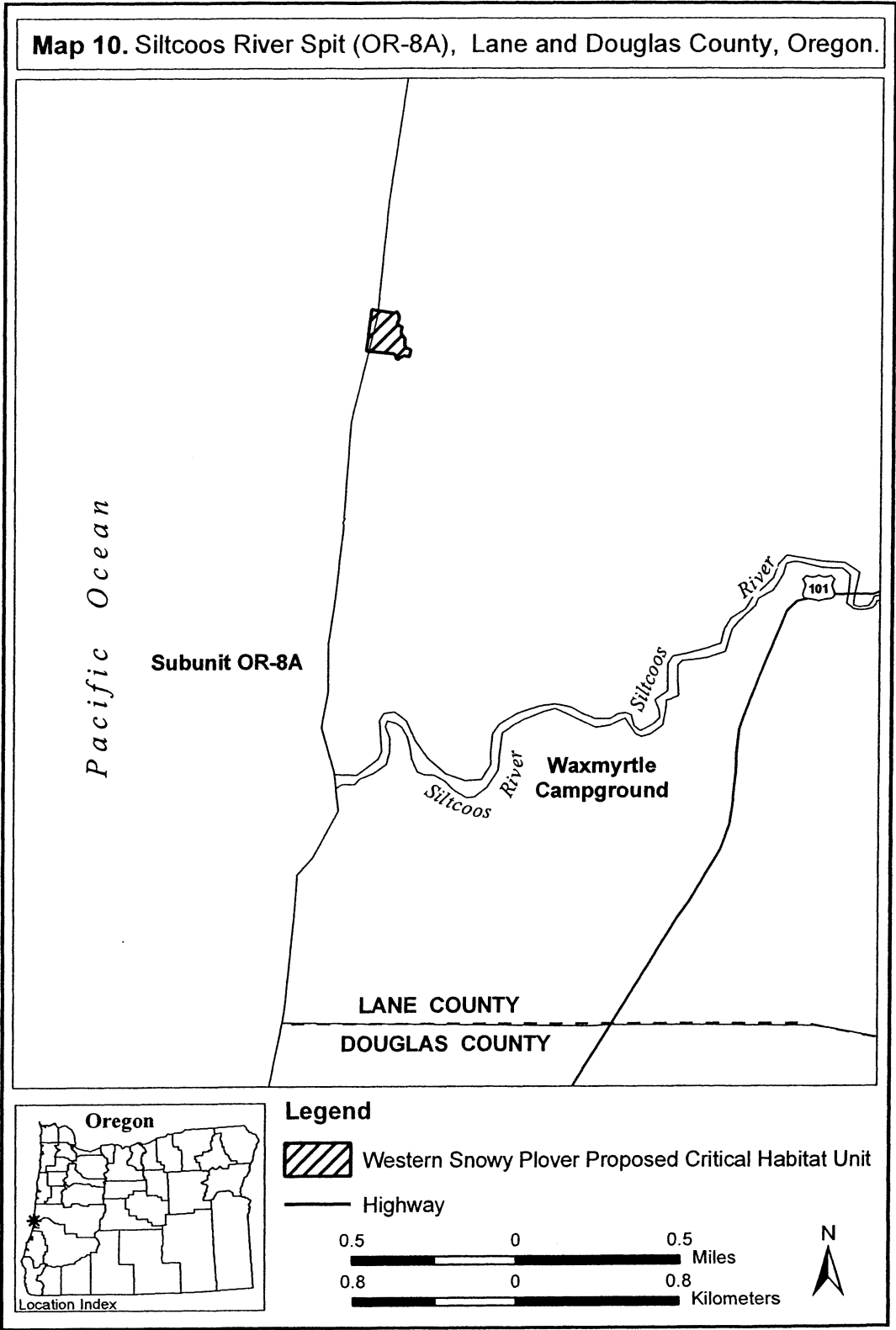
(i) From USGS 1:24,000 quadrangle maps Goose Pasture, and Tahkenitch Creek, Oregon, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 407380, 4860464; 407406, 4860666; 407511, 4860648; 407519, 4860648; 407522, 4860651; 407524, 4860654; 407527, 4860653; 407531, 4860649; 407535, 4860642; 407538,

4860635; 407538, 4860627; 407538, 4860619; 407537, 4860612; 407533, 4860609; 407530, 4860598; 407534, 4860589; 407553, 4860580; 407551, 4860572; 407549, 4860556; 407552, 4860545; 407556, 4860538; 407563, 4860528; 407570, 4860521; 407567, 4860514; 407566, 4860503; 407567, 4860492; 407577, 4860476; 407587, 4860473; 407596, 4860469; 407590, 4860435; 407561, 4860441; 407551,

4860436; 407542, 4860427; 407534, 4860424; 407526, 4860424; 407515, 4860451; 407380, 4860464; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 407380, 4860464.

(ii) **Note:** Map of Unit OR 8A (Map M10) follows:







(13) Unit OR 8B, Douglas County, Oregon.

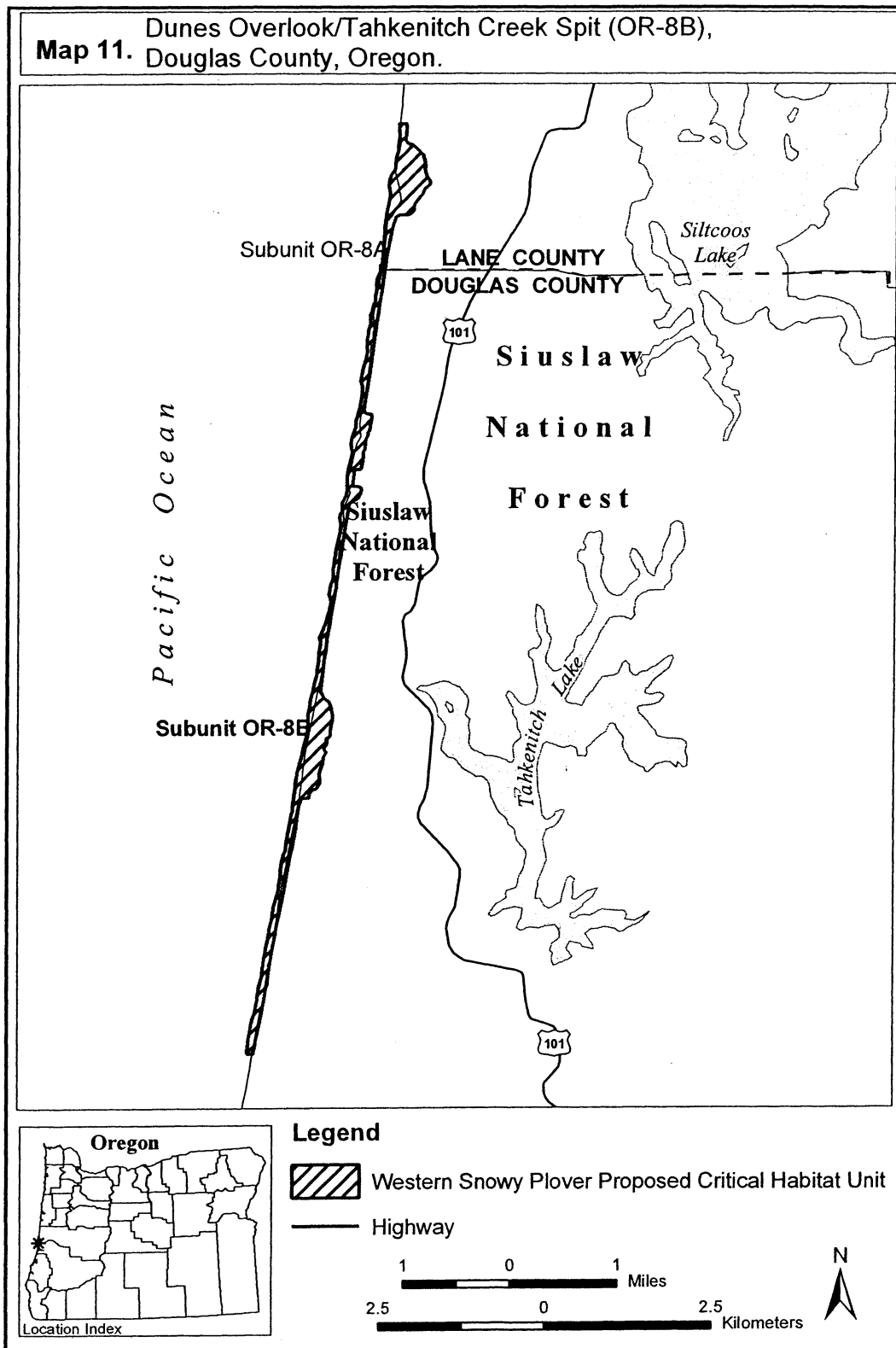
(i) From USGS 1:24,000 quadrangle map Tahkenitch Creek, Oregon, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 406189, 4851652; 406140, 4851272; 406110, 4850981; 406094, 4850863; 406112, 4850811; 406137, 4850770; 406164, 4850739; 406206, 4850717; 406241, 4850649; 406269, 4850528; 406271, 4850440; 406255, 4850358; 406244, 4850278; 406233, 4850190; 406208, 4850160; 406181, 4850149; 406192, 4850119; 406178, 4850053; 406151, 4849995; 406162, 4849965; 406181, 4849943; 406149, 4849887; 406142, 4849860; 406131, 4849819; 406125, 4849763; 406107, 4849710; 406076, 4849613; 406089, 4849502; 406063, 4849426; 406033, 4849394; 405990, 4849385; 405951, 4849350; 405932, 4849324; 405929, 4849295; 405921, 4849256; 405881, 4849256; 405830, 4849253; 405798, 4849226; 405769, 4849126; 405706, 4848682; 405673, 4848515; 405610, 4848210; 405577, 4847990; 405544, 4847815; 405461, 4847397; 405368, 4846903; 405280, 4846370; 405239, 4846137; 405096, 4845426; 405005, 4845434; 405022, 4845624; 405050, 4845765; 405069, 4845876; 405124, 4846045; 405154, 4846214; 405173, 4846400; 405225, 4846598; 405259, 4846861; 405308, 4847125; 405338, 4847285; 405365, 4847406; 405393, 4847605; 405432, 4847726; 405464, 4847878; 405505, 4848114; 405505, 4848215; 405526, 4848317; 405549, 4848411; 405568, 4848463; 405582, 4848526; 405588, 4848603; 405593, 4848630; 405626, 4848827; 405654, 4848993; 405681, 4849080; 405685, 4849161; 405712, 4849378; 405719, 4849497; 405744, 4849633; 405777, 4849767; 405819, 4849901; 405844, 4850059; 405879, 4850171; 405909, 4850333; 405898, 4850496; 405931, 4850644; 405953, 4850761; 406002, 4850989; 406034, 4851109; 406048, 4851202; 406062, 4851291; 406067, 4851372; 406069, 4851454; 406090, 4851580; 406079, 4851662; 406161, 4851892; 406192, 4852001; 406218, 4852092; 406239, 4852197; 406225, 4852259; 406209, 4852315; 406218, 4852367; 406230, 4852424; 406239, 4852484; 406266, 4852553;

406271, 4852635; 406273, 4852725; 406282, 4852799; 406294, 4852884; 406308, 4852962; 406321, 4853033; 406333, 4853104; 406348, 4853157; 406367, 4853248; 406379, 4853320; 406380, 4853362; 406377, 4853408; 406372, 4853454; 406369, 4853491; 406377, 4853533; 406406, 4853573; 406409, 4853618; 406406, 4853660; 406411, 4853702; 406426, 4853731; 406454, 4853795; 406476, 4853895; 406473, 4853951; 406476, 4854051; 406475, 4854119; 406494, 4854200; 406514, 4854270; 406530, 4854360; 406546, 4854443; 406532, 4854535; 406522, 4854585; 406551, 4854677; 406585, 4854767; 406603, 4854831; 406603, 4854865; 406608, 4854919; 406625, 4854991; 406645, 4855053; 406661, 4855121; 406679, 4855220; 406691, 4855306; 406702, 4855384; 406691, 4855441; 406671, 4855503; 406678, 4855555; 406661, 4855624; 406711, 4855718; 406739, 4855809; 406762, 4855906; 406774, 4855986; 406773, 4856058; 406762, 4856124; 406776, 4856189; 406787, 4856270; 406806, 4856354; 406815, 4856413; 406813, 4856487; 406833, 4856551; 406852, 4856628; 406860, 4856657; 406870, 4856676; 406877, 4856700; 406886, 4856729; 406887, 4856758; 406890, 4856789; 406904, 4856844; 406903, 4856902; 406899, 4856939; 406901, 4856996; 406910, 4857037; 406928, 4857075; 406954, 4857137; 406961, 4857195; 406963, 4857248; 406982, 4857293; 406989, 4857352; 406999, 4857467; 407004, 4857524; 407011, 4857598; 407012, 4857682; 407022, 4857762; 407023, 4857822; 407020, 4857860; 407039, 4857973; 407104, 4858294; 407093, 4858371; 407076, 4858441; 407082, 4858507; 407106, 4858572; 407131, 4858625; 407164, 4858662; 407179, 4858710; 407183, 4858790; 407200, 4858879; 407221, 4858961; 407247, 4859089; 407246, 4859131; 407241, 4859169; 407227, 4859248; 407237, 4859307; 407234, 4859358; 407347, 4859349; 407345, 4859280; 407338, 4859242; 407338, 4859206; 407336, 4859179; 407334, 4859157; 407329, 4859144; 407328, 4859128; 407331, 4859105; 407339, 4859089; 407347, 4859076; 407359, 4859065; 407371, 4859057; 407390, 4859051; 407418, 4859039;

407436, 4859030; 407457, 4859016; 407479, 4858997; 407513, 4858967; 407532, 4858949; 407554, 4858932; 407579, 4858907; 407587, 4858884; 407599, 4858847; 407612, 4858818; 407618, 4858790; 407626, 4858760; 407629, 4858742; 407628, 4858717; 407621, 4858691; 407615, 4858674; 407621, 4858634; 407632, 4858609; 407642, 4858582; 407654, 4858557; 407671, 4858533; 407691, 4858503; 407697, 4858486; 407699, 4858468; 407702, 4858459; 407680, 4858431; 407643, 4858402; 407633, 4858399; 407607, 4858357; 407565, 4858284; 407532, 4858252; 407492, 4858191; 407465, 4858156; 407454, 4858128; 407455, 4858063; 407402, 4858011; 407335, 4857992; 407298, 4857997; 407266, 4857992; 407232, 4857990; 407203, 4857980; 407181, 4857952; 407161, 4857909; 407146, 4857855; 407132, 4857793; 407127, 4857763; 407115, 4857726; 407092, 4857601; 407078, 4857519; 407056, 4857385; 407021, 4857166; 407011, 4857100; 406997, 4856986; 406943, 4856627; 406890, 4856228; 406828, 4855764; 406774, 4855388; 406720, 4855094; 406721, 4855074; 406731, 4855047; 406756, 4855023; 406791, 4855014; 406827, 4855005; 406838, 4854997; 406815, 4854865; 406816, 4854840; 406812, 4854805; 406803, 4854770; 406787, 4854746; 406784, 4854725; 406773, 4854681; 406749, 4854626; 406750, 4854589; 406731, 4854491; 406714, 4854455; 406710, 4854438; 406714, 4854398; 406700, 4854302; 406684, 4854217; 406675, 4854197; 406621, 4854191; 406594, 4854177; 406581, 4854167; 406555, 4853958; 406555, 4853937; 406601, 4853933; 406635, 4853937; 406665, 4853927; 406682, 4853911; 406679, 4853866; 406665, 4853816; 406650, 4853787; 406617, 4853748; 406582, 4853724; 406540, 4853706; 406525, 4853688; 406511, 4853681; 406504, 4853649; 406324, 4852508; 406312, 4852398; 406288, 4852280; 406189, 4851652; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 406189, 4851652.

(ii) **Note:** Map of Unit OR 8B (Map M11) follows:







(14) Unit OR 8D, Coos County, Oregon.

(i) From USGS 1:24,000 quadrangle map Lakeside, Oregon, land bounded by the following UTM 10 NAD 27

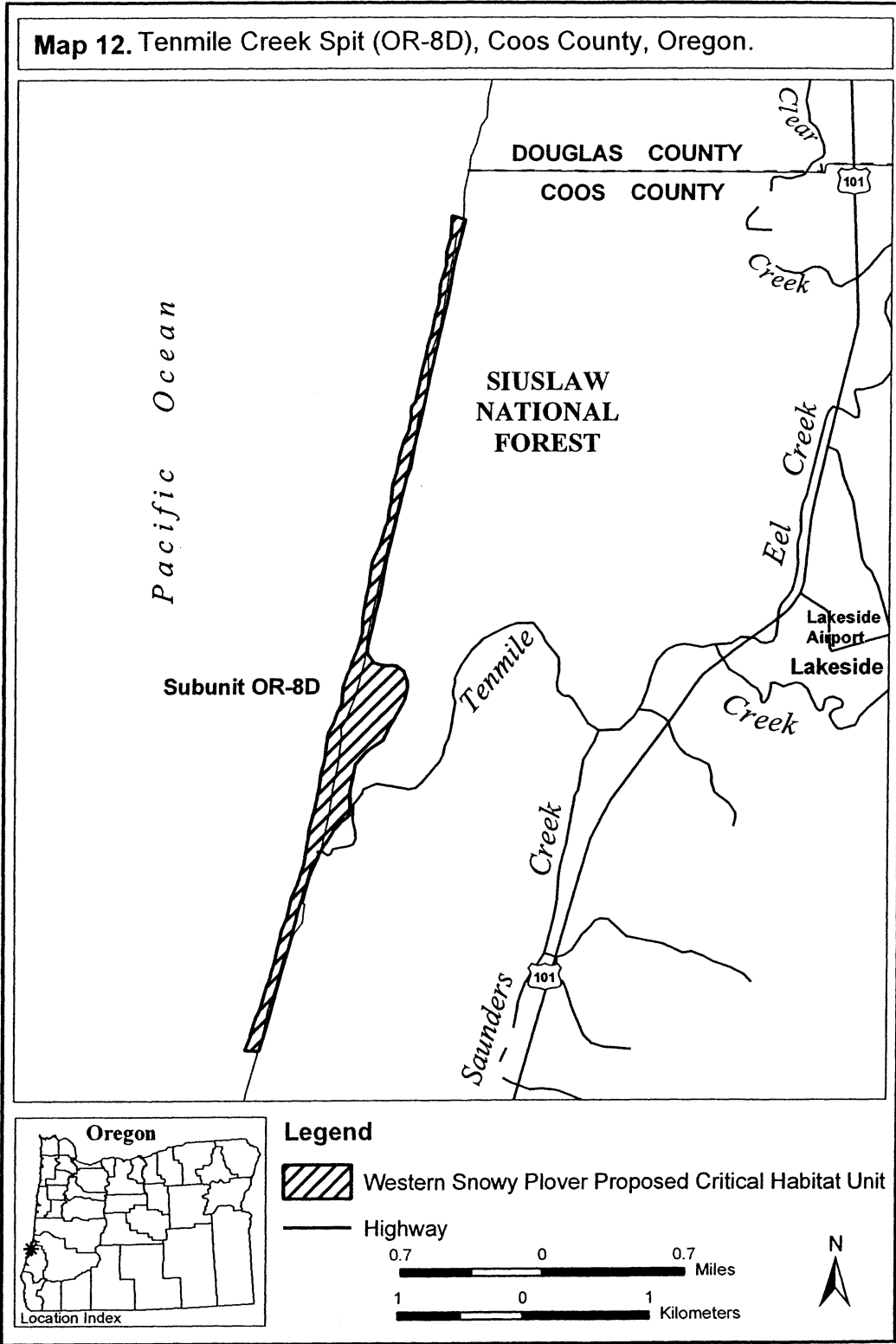
coordinates (E,N): 401636, 4828760; 401679, 4828749; 401747, 4828726; 401658, 4828374; 401613, 4828096; 401470, 4827477; 401409, 4827191; 401129, 4826018; 401127, 4826013; 401086, 4825757; 401054, 4825630; 401025, 4825485; 400988, 4825352; 400986, 4825307; 401004, 4825278;

401041, 4825223; 401105, 4825207; 401218, 4825201; 401279, 4825159; 401303, 4825088; 401306, 4825027; 401290, 4824934; 401229, 4824826; 401173, 4824723; 401118, 4824609; 400993, 4824523; 400901, 4824418; 400880, 4824308; 400860, 4824209; 400860, 4824112; 400857, 4824072; 400855, 4824044; 400852, 4824012; 400827, 4823985; 400798, 4823971; 400769, 4823937; 400747, 4823910; 400729, 4823894; 400718, 4823871; 400697, 4823844; 400679, 4823812;

400650, 4823775; 400612, 4823704; 400552, 4823593; 400483, 4823365; 400446, 4823262; 400393, 4823043; 400362, 4822926; 400335, 4822833; 400320, 4822785; 400224, 4822422; 400189, 4822303; 400141, 4822147; 400030, 4822156; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 401636, 4828760.

(ii) **Note:** Map of Unit OR 8D (Map M12) follows:







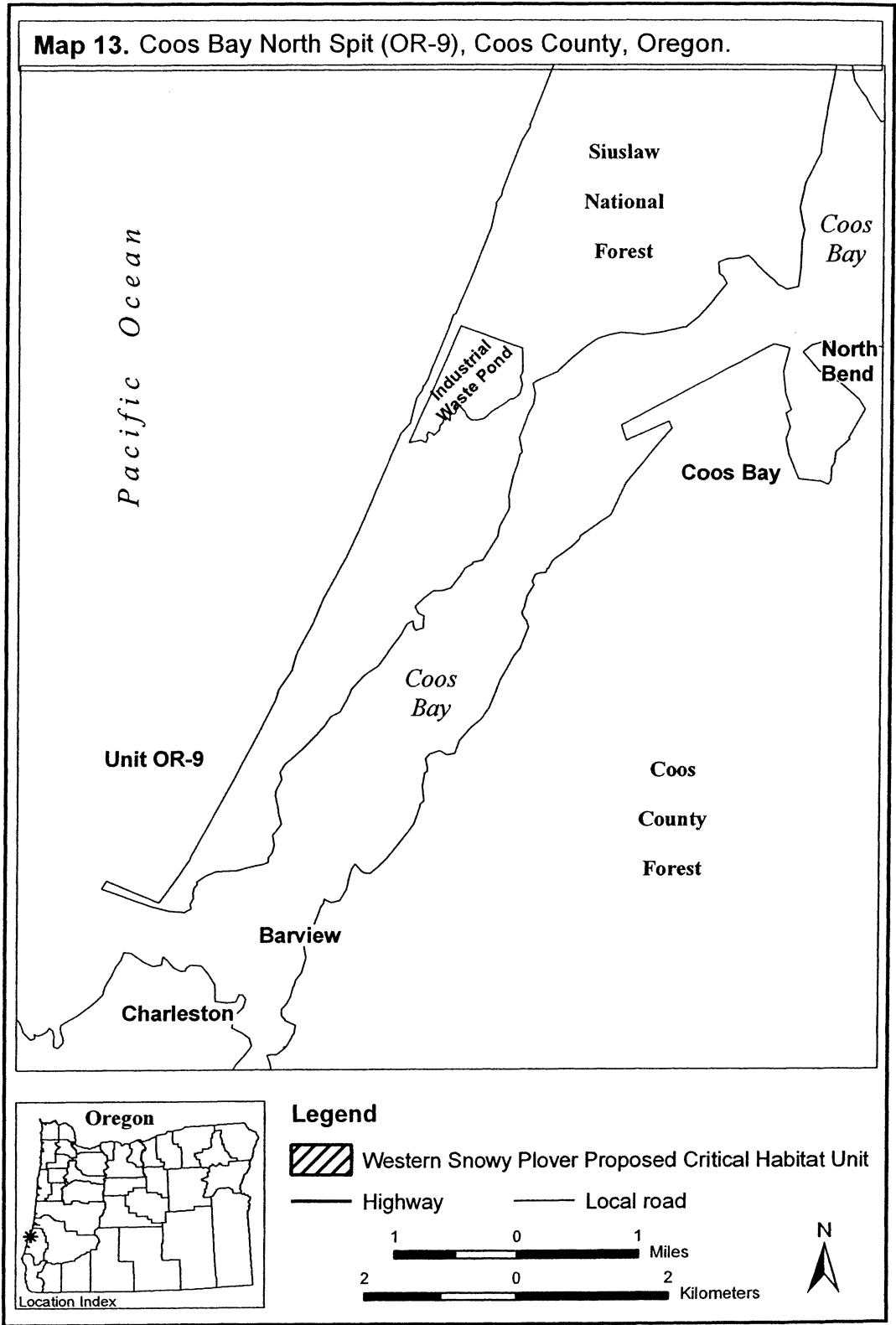
(15) Unit OR 9, Coos County, Oregon.  
(i) From USGS 1:24,000 quadrangle maps Empire, and Charleston, Oregon, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 401636, 4828760; 394245, 4805890; 393957, 4805261; 393701, 4804768; 393592, 4804572; 393390, 4804169; 393440, 4804146; 393286, 4803816; 393209,

4803614; 393042, 4803271; 392971, 4803090; 392984, 4802913; 392971, 4802808; 392997, 4802749; 393060, 4802650; 392984, 4802525; 392909, 4802426; 392851, 4802339; 392965, 4802319; 393103, 4802120; 393037, 4801882; 392991, 4801895; 392942, 4801829; 392915, 4801780; 392702, 4801829; 392390, 4801908; 392192,

4801921; 392137, 4801773; 392058, 4801603; 391696, 4801111; 391595, 480115 proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 401636, 4828760.

(ii) **Note:** Map of Unit OR 9 (Map M13) follows:







(16) Unit OR 10A, Coos County and Curry County, Oregon.

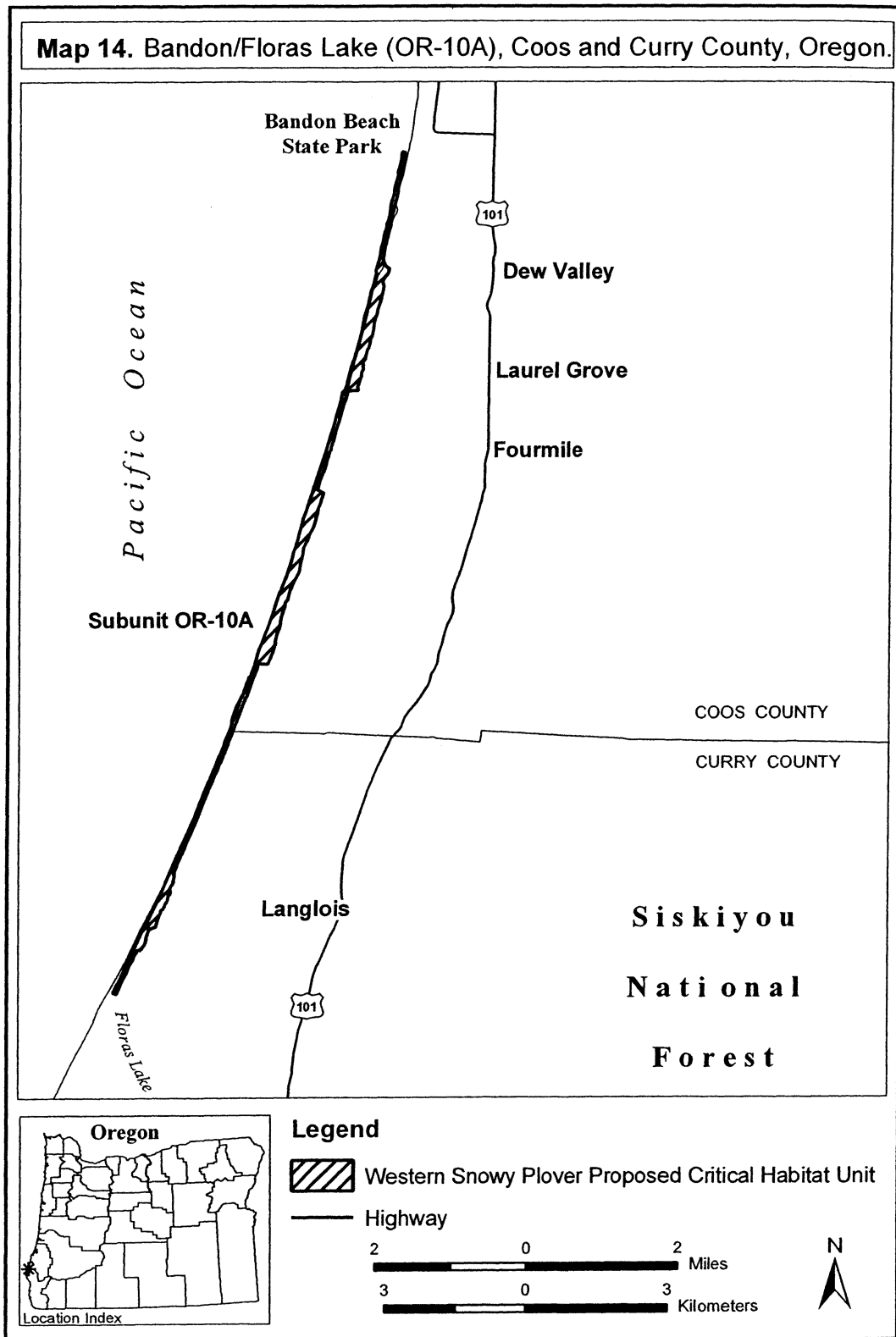
(i) From USGS 1:24,000 quadrangle maps Bandon, Floras Lake, and Langlois, Oregon, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 383032, 4769361; 383046, 4769436; 383042, 4769495; 383042, 4769541; 383036, 4769584; 383034, 4769625; 383032, 4769672; 383047, 4769672; 383079, 4769666; 383115, 4769654; 383145, 4769655; 383178, 4769655; 383202, 4769645; 383228, 4769633; 383248, 4769596; 383259, 4769526; 383250, 4769486; 383225, 4769479; 383179, 4769476; 383171, 4769447; 383135, 4769361; 383100, 4769213; 383079, 4769128; 383063, 4769061; 383047, 4768989; 383045, 4768946; 383030, 4768890; 383012, 4768820; 382991, 4768707; 382977, 4768620; 382965, 4768535; 382940, 4768432; 382917, 4768316; 382895, 4768227; 382870, 4768128; 382853, 4768018; 382833, 4767920; 382798, 4767778; 382768, 4767645; 382735, 4767504; 382713, 4767389; 382691, 4767273; 382666, 4767174; 382643, 4767072; 382628, 4766975; 382608, 4766922; 382591, 4766834; 382566, 4766684; 382544, 4766554; 382576, 4766510; 382603, 4766451; 382644, 4766419; 382674, 4766392; 382671, 4766339; 382641, 4766274; 382588, 4766209; 382541, 4766138; 382545, 4766086; 382567, 4766024; 382556, 4765947; 382545, 4765889; 382529, 4765815; 382508, 4765731; 382480, 4765623; 382443, 4765515; 382432, 4765445; 382402, 4765359; 382379, 4765289; 382368, 4765189; 382358, 4765107; 382333, 4765011; 382296, 4764904; 382289, 4764842; 382255, 4764757; 382230, 4764699; 382219, 4764637; 382198, 4764585; 382190, 4764527; 382180, 4764495; 382154, 4764458; 382142, 4764403; 382142, 4764352; 382142, 4764287; 382120, 4764238; 382110, 4764191; 382108, 4764152; 382081, 4764081; 382057, 4764030; 382051, 4764000; 382053,

4763958; 382032, 4763917; 382035, 4763877; 382038, 4763851; 381965, 4763851; 381908, 4763845; 381855, 4763831; 381835, 4763787; 381815, 4763732; 381796, 4763652; 381768, 4763565; 381740, 4763474; 381700, 4763351; 381665, 4763216; 381633, 4763117; 381613, 4763049; 381577, 4762926; 381547, 4762797; 381509, 4762682; 381487, 4762602; 381457, 4762530; 381435, 4762449; 381415, 4762385; 381387, 4762281; 381356, 4762183; 381331, 4762117; 381322, 4762102; 381279, 4761979; 381241, 4761866; 381217, 4761735; 381284, 4761715; 381342, 4761681; 381292, 4761524; 381229, 4761341; 381210, 4761227; 381165, 4761047; 381126, 4760920; 381057, 4760801; 381017, 4760674; 380975, 4760600; 380940, 4760529; 380922, 4760431; 380893, 4760280; 380861, 4760150; 380845, 4760050; 380821, 4759978; 380771, 4759894; 380735, 4759845; 380710, 4759775; 380685, 4759712; 380647, 4759617; 380621, 4759515; 380602, 4759445; 380558, 4759388; 380539, 4759293; 380507, 4759191; 380469, 4759070; 380450, 4758982; 380431, 4758842; 380405, 4758791; 380386, 4758721; 380361, 4758639; 380348, 4758556; 380340, 4758479; 380312, 4758387; 380278, 4758300; 380183, 4758086; 379983, 4758087; 379957, 4757987; 379865, 4757759; 379821, 4757615; 379737, 4757407; 379704, 4757340; 379624, 4757140; 379560, 4756968; 379496, 4756803; 379432, 4756628; 379387, 4756528; 379333, 4756378; 379270, 4756202; 379190, 4756013; 379160, 4755949; 379119, 4755847; 379072, 4755728; 379003, 4755562; 378939, 4755407; 378934, 4755397; 378894, 4755299; 378848, 4755186; 378802, 4755067; 378732, 4754907; 378684, 4754772; 378652, 4754685; 378588, 4754546; 378553, 4754457; 378497, 4754350; 378440, 4754210; 378435, 4754197; 378372, 4754061; 378343, 4753975; 378311, 4753896; 378286, 4753834; 378276,

4753808; 378264, 4753779; 378238, 4753706; 378235, 4753663; 378233, 4753630; 378226, 4753586; 378215, 4753550; 378208, 4753517; 378208, 4753479; 378193, 4753454; 378168, 4753407; 378140, 4753371; 378140, 4753331; 378149, 4753278; 378140, 4753234; 378110, 4753195; 378099, 4753128; 378063, 4753070; 378034, 4753026; 378017, 4752979; 377999, 4752941; 377988, 4752913; 377955, 4752901; 377934, 4752879; 377939, 4752854; 377935, 4752828; 377911, 4752803; 377895, 4752751; 377879, 4752704; 377867, 4752664; 377851, 4752619; 377850, 4752586; 377832, 4752547; 377811, 4752531; 377785, 4752535; 377769, 4752528; 377750, 4752506; 377728, 4752511; 377714, 4752531; 377697, 4752531; 377703, 4752515; 377700, 4752489; 377688, 4752482; 377692, 4752456; 377673, 4752408; 377646, 4752346; 377641, 4752310; 377639, 4752271; 377630, 4752232; 377594, 4752154; 377575, 4752116; 377560, 4752101; 377543, 4752081; 377528, 4752077; 377524, 4752063; 377532, 4752050; 377506, 4752057; 377484, 4752070; 377462, 4752061; 377445, 4752023; 377415, 4751972; 377378, 4751899; 377368, 4751881; 377287, 4751726; 377202, 4751552; 377118, 4751382; 377052, 4751245; 377001, 4751131; 376982, 4751082; 376962, 4751045; 376928, 4750980; 376866, 4750871; 376751, 4750655; 376686, 4750517; 376667, 4750450; 376658, 4750421; 376640, 4750398; 376621, 4750368; 376621, 4750340; 376624, 4750312; 376624, 4750295; 376616, 4750282; 376607, 4750262; 376599, 4750241; 376588, 4750216; 376577, 4750207; 376442, 4750212; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 383032, 4769361.

(ii) **Note:** Map of Unit OR 10A (Map M14) follows:







(17) Unit CA 1, Del Norte County, California.

(i) From USGS 1:24,000 quadrangle map Crescent City, California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 398209, 4631037; 398218, 4631060; 398224, 4631082;

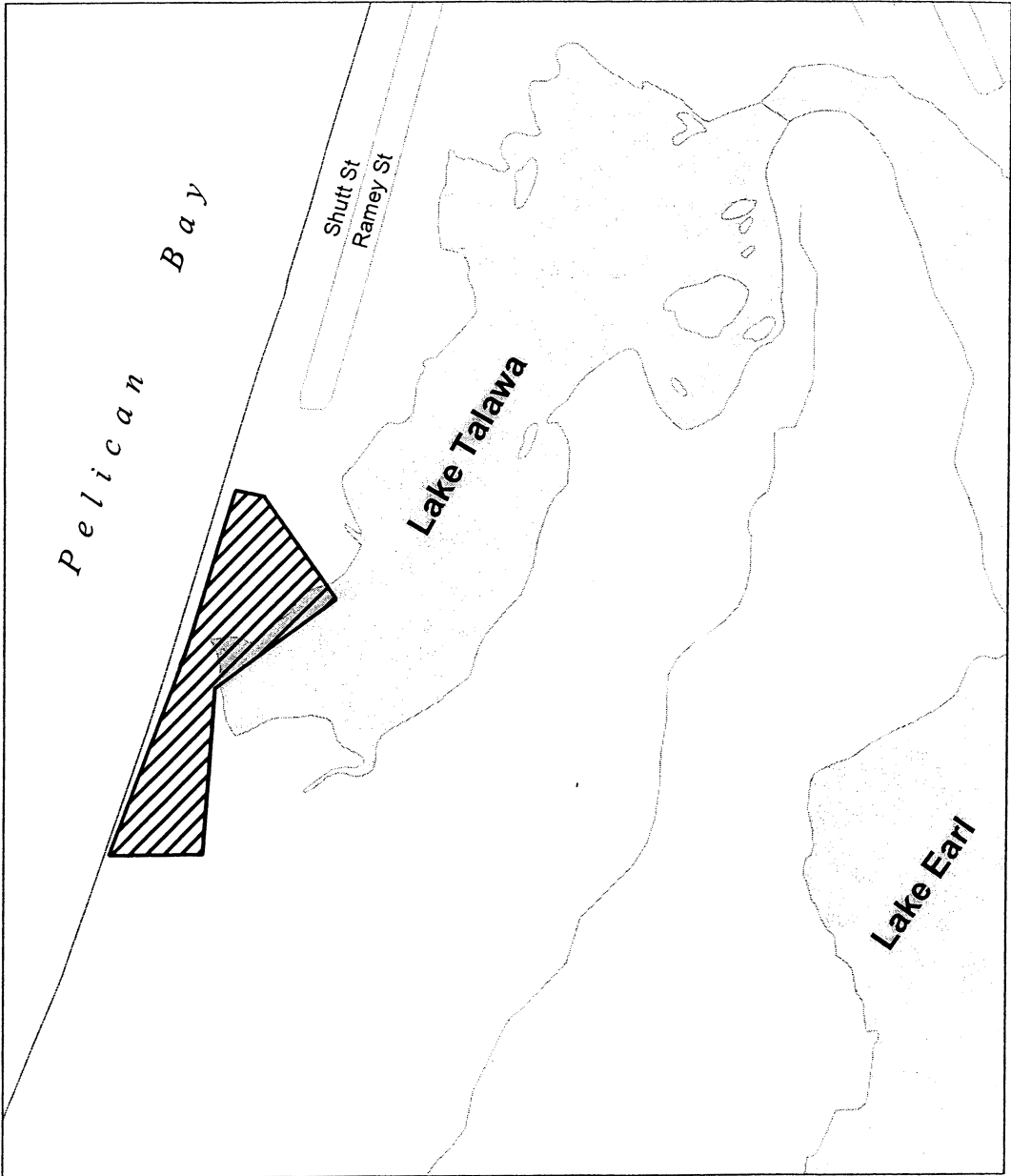
398235, 4631106; 398262, 4631184; 398262, 4631184; 398262, 4631185; 398373, 4631543; 398383, 4631574; 398467, 4631555; 398466, 4631552; 398670, 4631260; 398324, 4631005; 398289, 4630526; 398017, 4630524; 398209, 4631037; proceed generally N

following the mean low water mark (defined at the beginning of the section) and returning to 398209, 4631037.

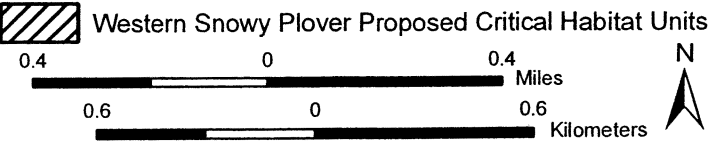
(ii) **Note:** Map of Unit CA 1 (Map M15) follows:



**Map 15. Lake Earl (CA-1), Del Norte County, California.**



**Legend**





(18) Unit CA 2, Humboldt County, California.

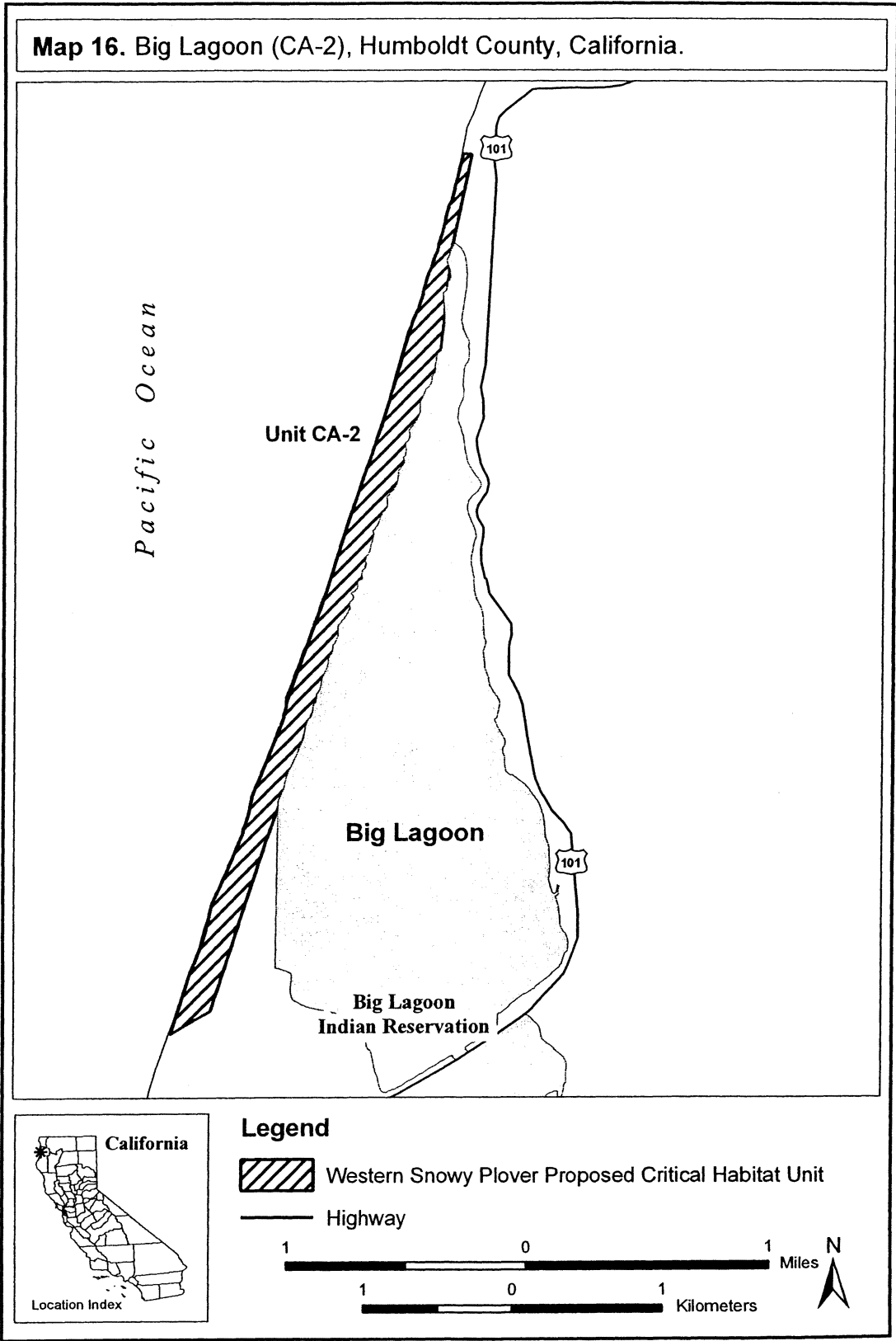
(i) From USGS 1:24,000 quadrangle maps Rodgers Peak, and Trinidad, California, land bounded by the following UTM 10 NAD 27 coordinates

(E,N): 406854, 4563175; 406909, 4563169; 406777, 4562537; 406691, 4561673; 406135, 4560211; 405555, 4558600; 405187, 4557482; 404923, 4557330; proceed generally N following the mean low water mark (defined at the

beginning of the section) and returning to 406854, 4563175.

(ii) **Note:** Map of Unit CA 2 (Map M16) follows:







(19) Unit CA 3A, Humboldt County, California.

(i) From USGS 1:24,000 quadrangle maps Crannell, and Arcata North, California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 406554, 4541473; 406850, 4541471; 406870, 4540965; 406746, 4540695; 406583, 4540426; 406413, 4539149; 406354, 4538891; 406371, 4538797; 406294, 4538652; 406149,

4538652; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 406554, 4541473.

(ii) **Note:** Map of Unit CA 3A (Map M17) follows after description of Unit CA 3B.

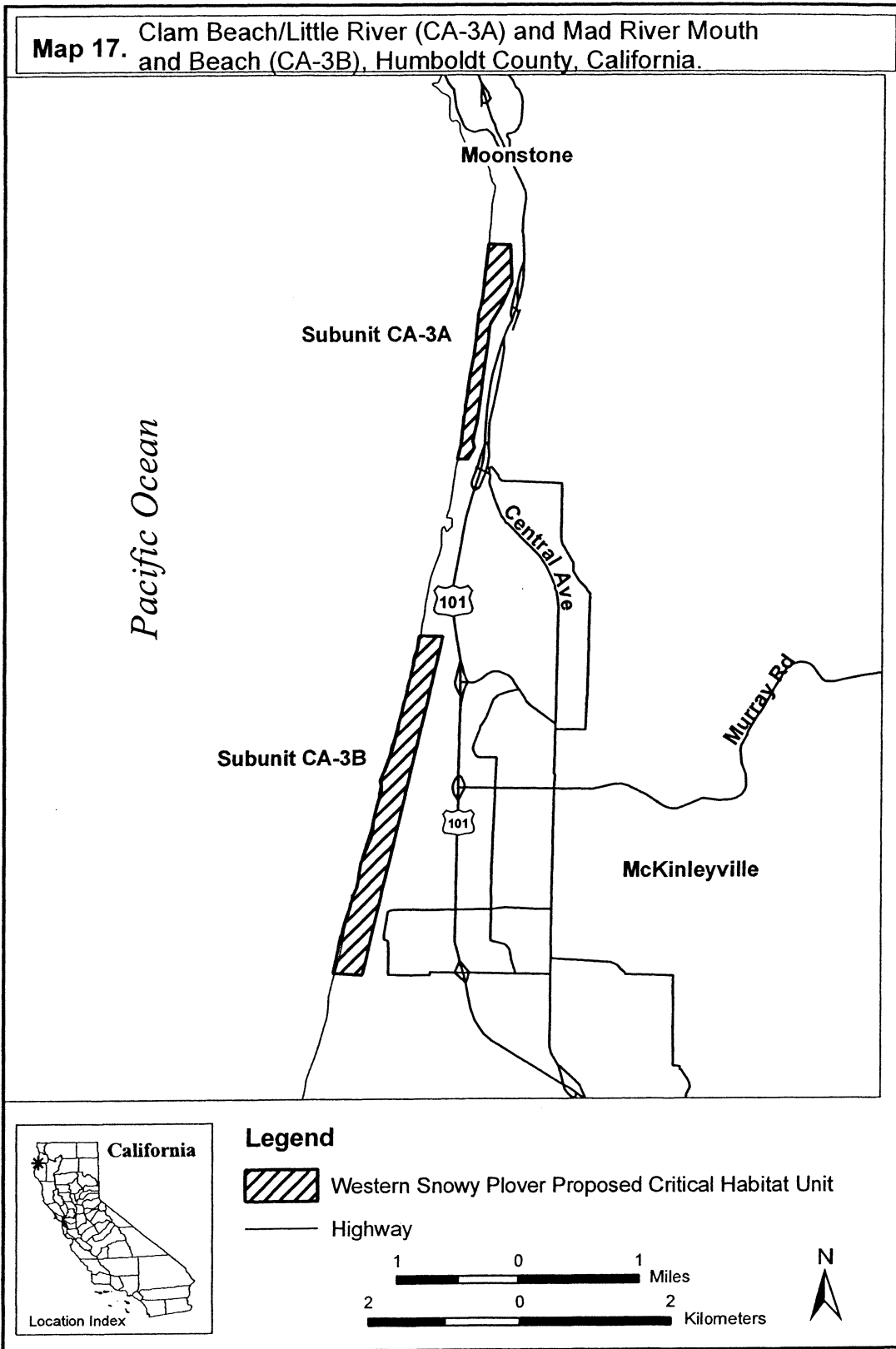
(20) Unit CA 3B, Humboldt County, California.

(i) From USGS 1:24,000 quadrangle maps Arcata North, and Tyee City,

California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 405657, 4536319; 405968, 4536317; 404931, 4531851; 404539, 4531879 proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 405657, 4536319.

(ii) **Note:** Map of Units CA 3A and CA 3B (Map M17) follows:







(21) Unit CA 4A, Humboldt County, California.

(i) From USGS 1:24,000 quadrangle maps Eureka, Fields Landing, and Cannibal Island, California, land bounded by the following UTM 10 NAD

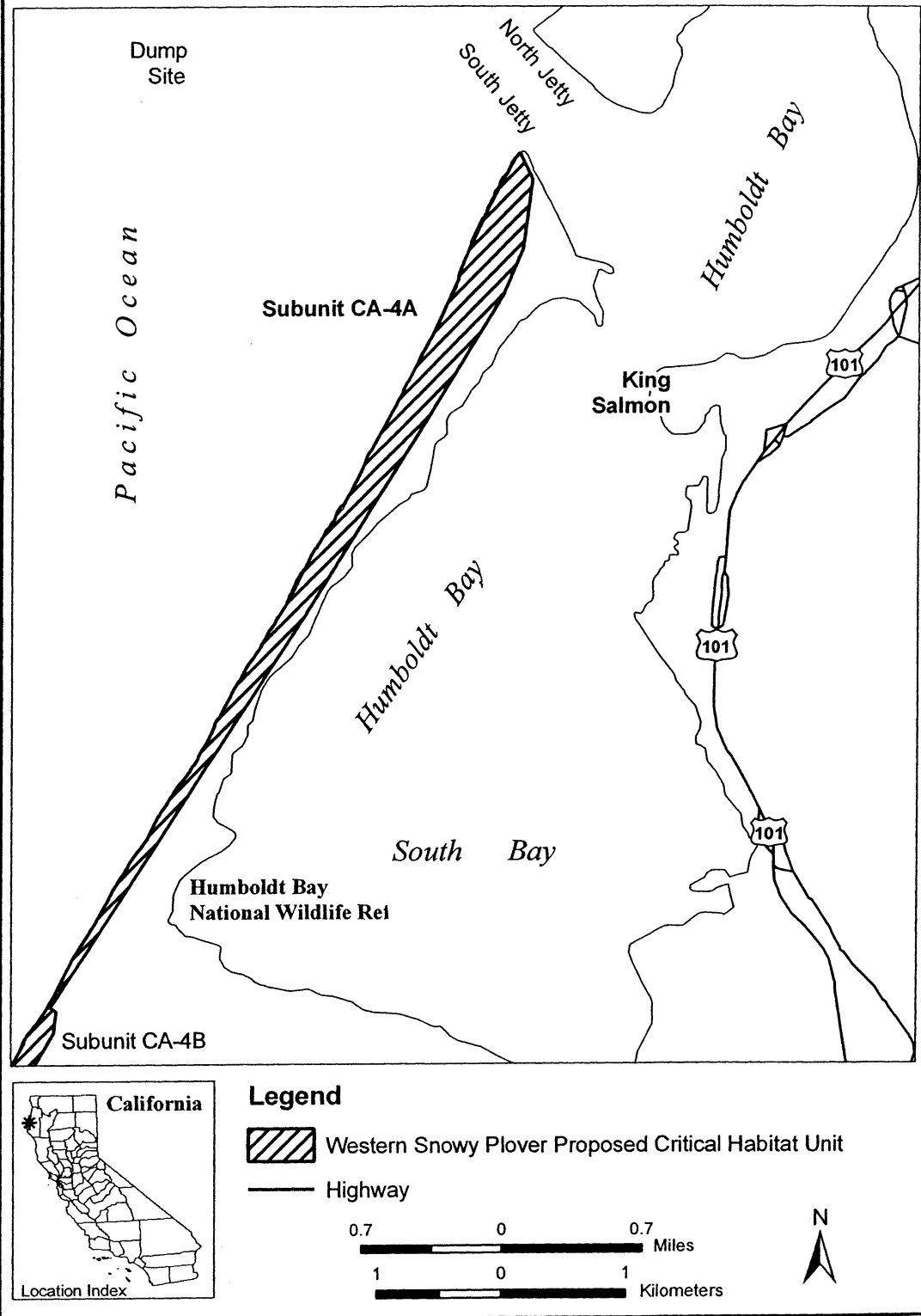
27 coordinates (E,N): 395866, 4512270; 395968, 4512054; 395898, 4511510; 395741, 4511140; 394616, 4509320; 394166, 4508589; 392132, 4505460; 392114, 4505473 proceed generally N following the mean low water mark

(defined at the beginning of the section) and returning to 395866, 4512270.

(ii) **Note:** Map of Unit CA 4A (Map M18) follows:



**Map 18. Humboldt Bay; South Spit (CA-4A), Humboldt County, California.**





(22) Unit CA 4B, Humboldt County, California.

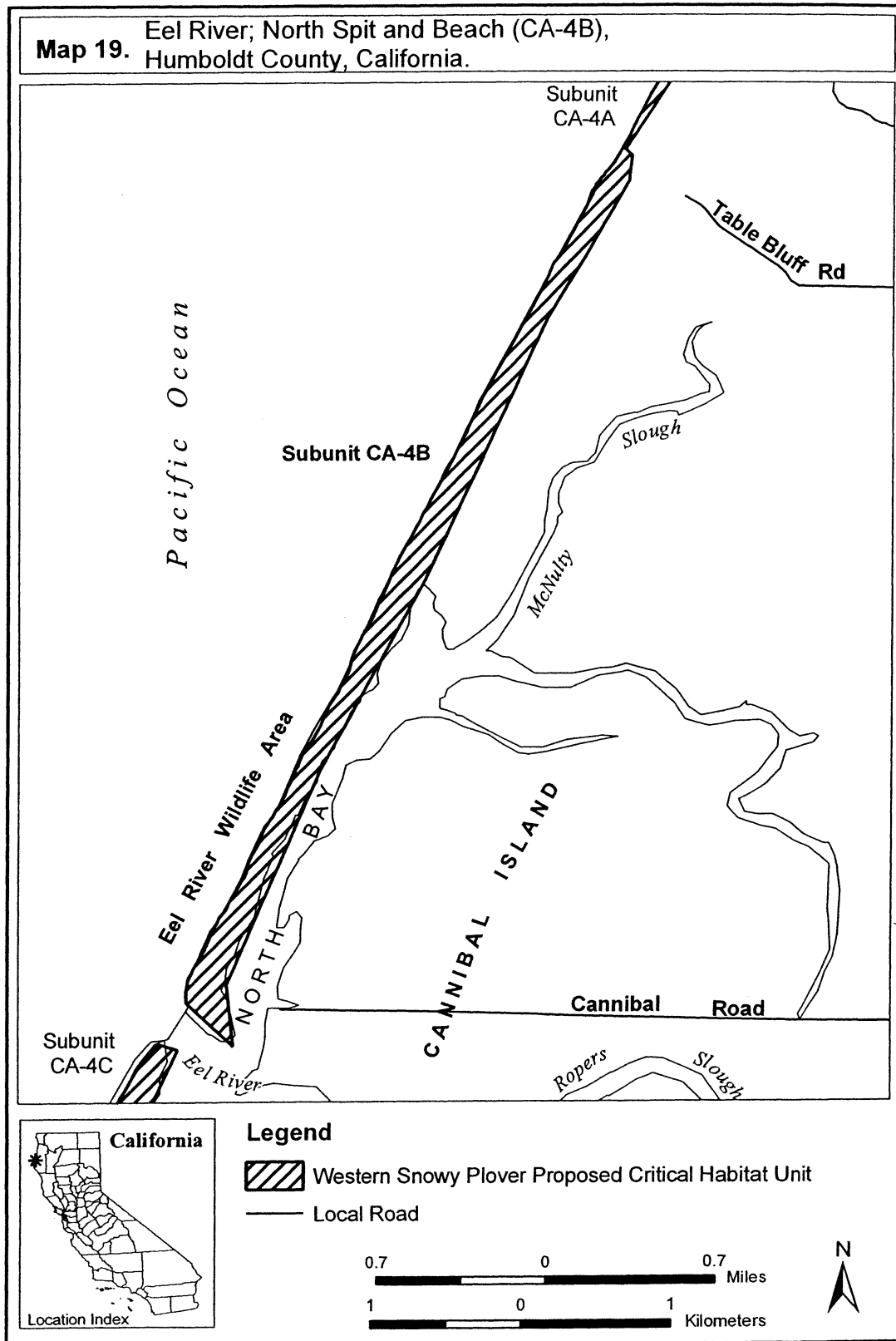
(i) From USGS 1:24,000 quadrangle map Cannibal Island, California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 392114, 4505473;

392178, 4505423; 392157, 4505254; 391892, 4504800; 391616, 4504350; 390808, 4502622; 390100, 4501334; 389495, 4499927; 389538, 4499526; 389226, 4499809 proceed generally N following the mean low water mark

(defined at the beginning of the section) and returning to 392114, 4505473.

(ii) **Note:** Map of Unit CA 4B (Map M19) follows:







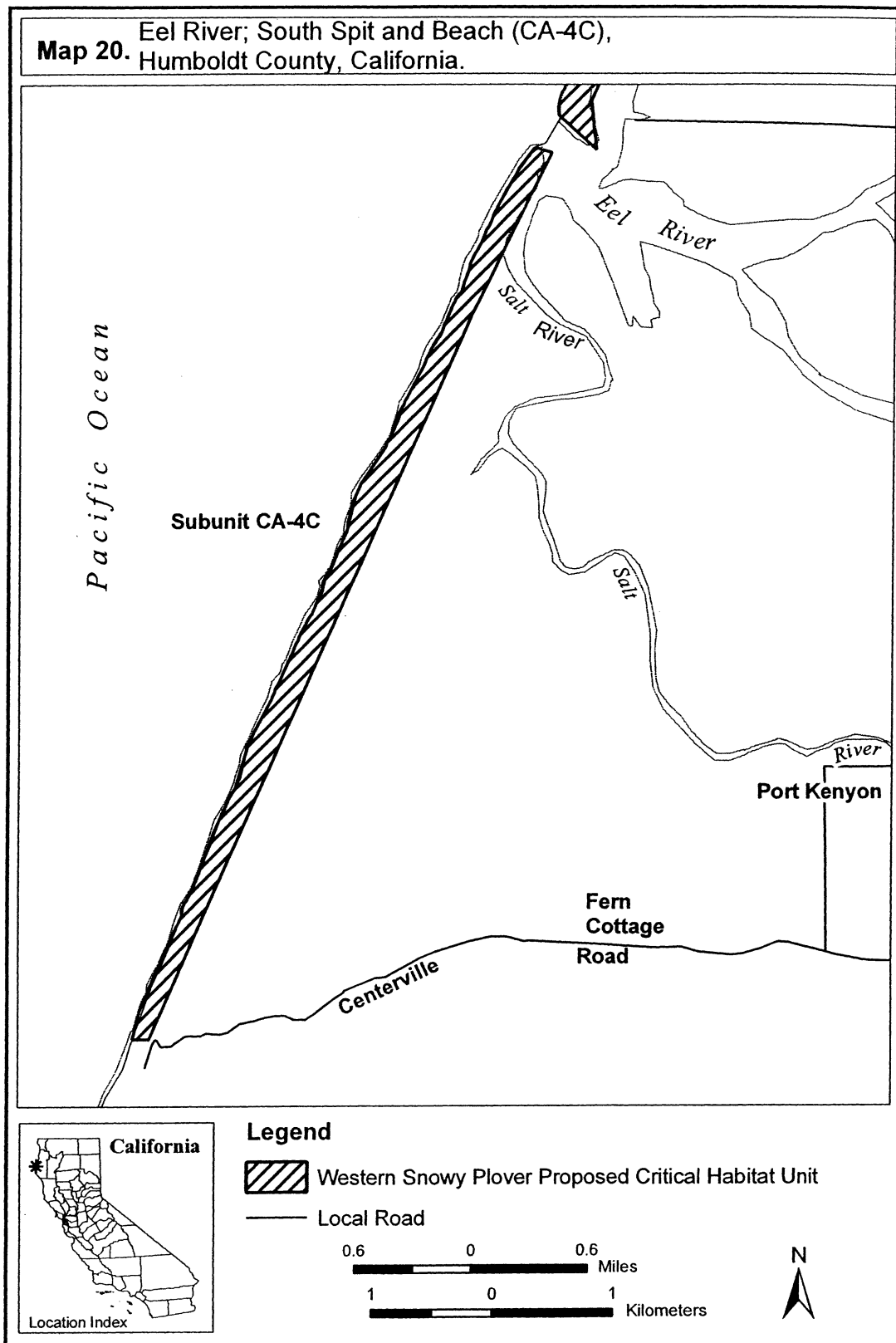
(23) Unit CA 4C, Humboldt County, California.

(i) From USGS 1:24,000 quadrangle maps Cannibal Island, and Ferndale, California, land bounded by the

following UTM 10 NAD 27 coordinates (E,N): 389046, 4499539; 389171, 4499501; 388506, 4498145; 385862, 4492184; 385723, 4492184 proceed generally N following the mean low

water mark (defined at the beginning of the section) and returning to 389046, 4499539.

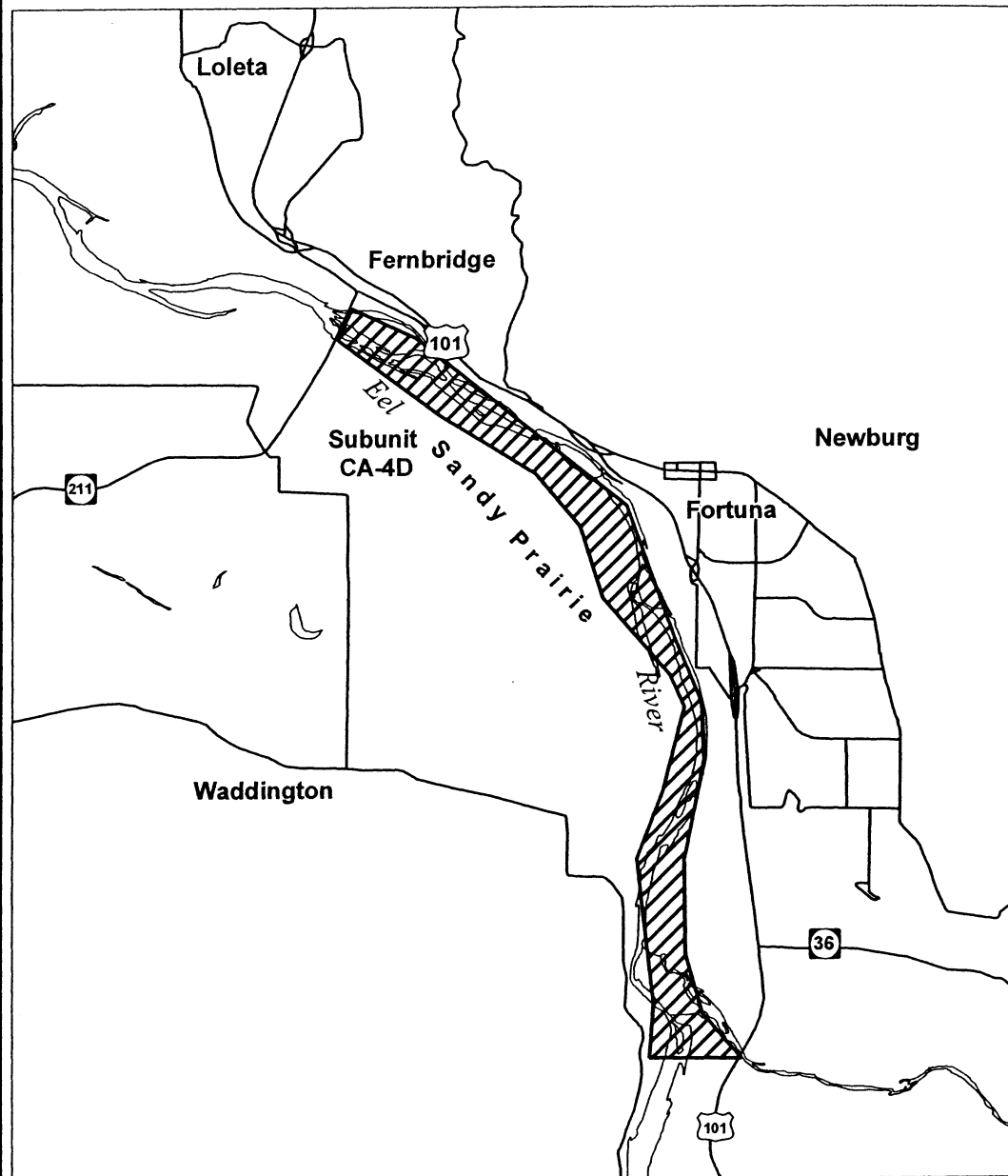
(ii) **Note:** Map of Unit CA 4C (Map M20) follows:





(24) Unit CA 4D, Humboldt County, California.	402020, 4490920; 402257, 4491861; 402084, 4492244; 401310, 4493127; 401048, 4493965; 400511, 4494573; 399443, 4495225; 398221, 4496114; 398394, 4496472; 399149, 4496127; 400242, 4495244; 401586, 4494208; 402142, 4492667; 402449, 4491912; 402481, 4491253; 402263, 4490095;	402276, 4489021; 402468, 4488324; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 402468, 4488324.
(i) From USGS 1:24,000 quadrangle map Fortuna, California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 402468, 4488324; 402916, 4487812; 401861, 4487818; 401912, 4488452; 401713, 4490121;		(ii) <b>Note:</b> Map of Unit CA 4D (Map M21) follows:



**Map 21. Eel River Gravel Bars (CA-4D), Humboldt County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit





(25) Unit CA 5, Mendocino County, California.

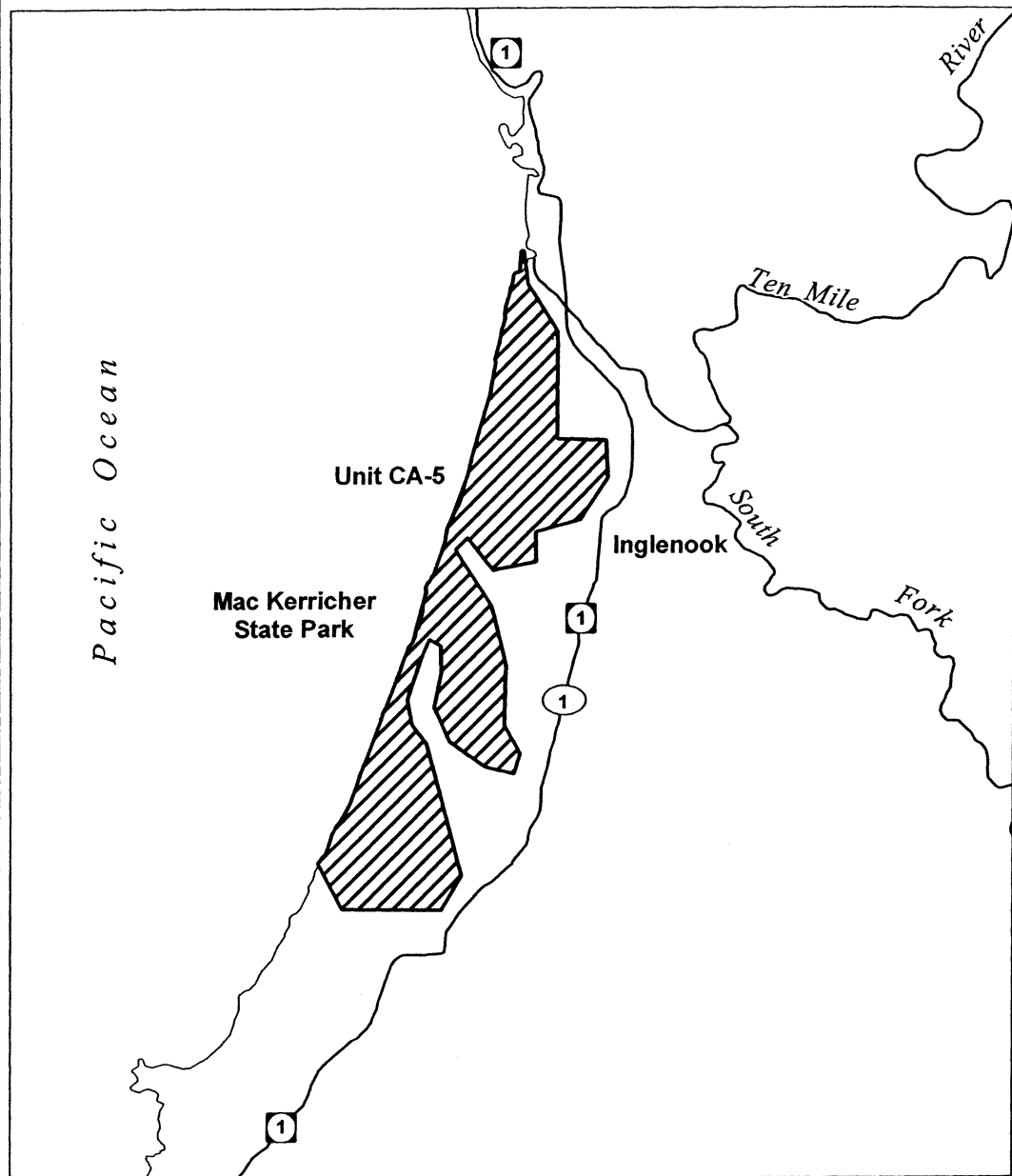
(i) From USGS 1:24,000 quadrangle map Inglenook, California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 434183, 4378272; 434210, 4378274; 434246, 4377994; 434507, 4377586; 434498, 4376652; 434928, 4376643; 434941, 4376311;

434702, 4375952; 434316, 4375850; 434321, 4375592; 433949, 4375521; 433722, 4375797; 433623, 4375691; 433938, 4375209; 434062, 4374702; 434048, 4374174; 434190, 4373926; 434133, 4373749; 433892, 4373805; 433570, 4374036; 433436, 4374324; 433498, 4374626; 433493, 4374864; 433391, 4374920; 433325, 4374764;

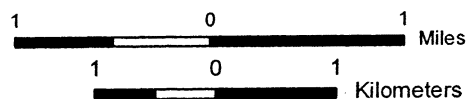
433205, 4374397; 433246, 4374176; 433373, 4374009; 433684, 4372868; 433502, 4372573; 432647, 4372582; 432442, 4372975; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 434183, 4378272.

(ii) **Note:** Map of Unit CA 5 (Map M22) follows:



**Map 22. MacKerricher Beach (CA-5), Mendocino County, California.****Legend**

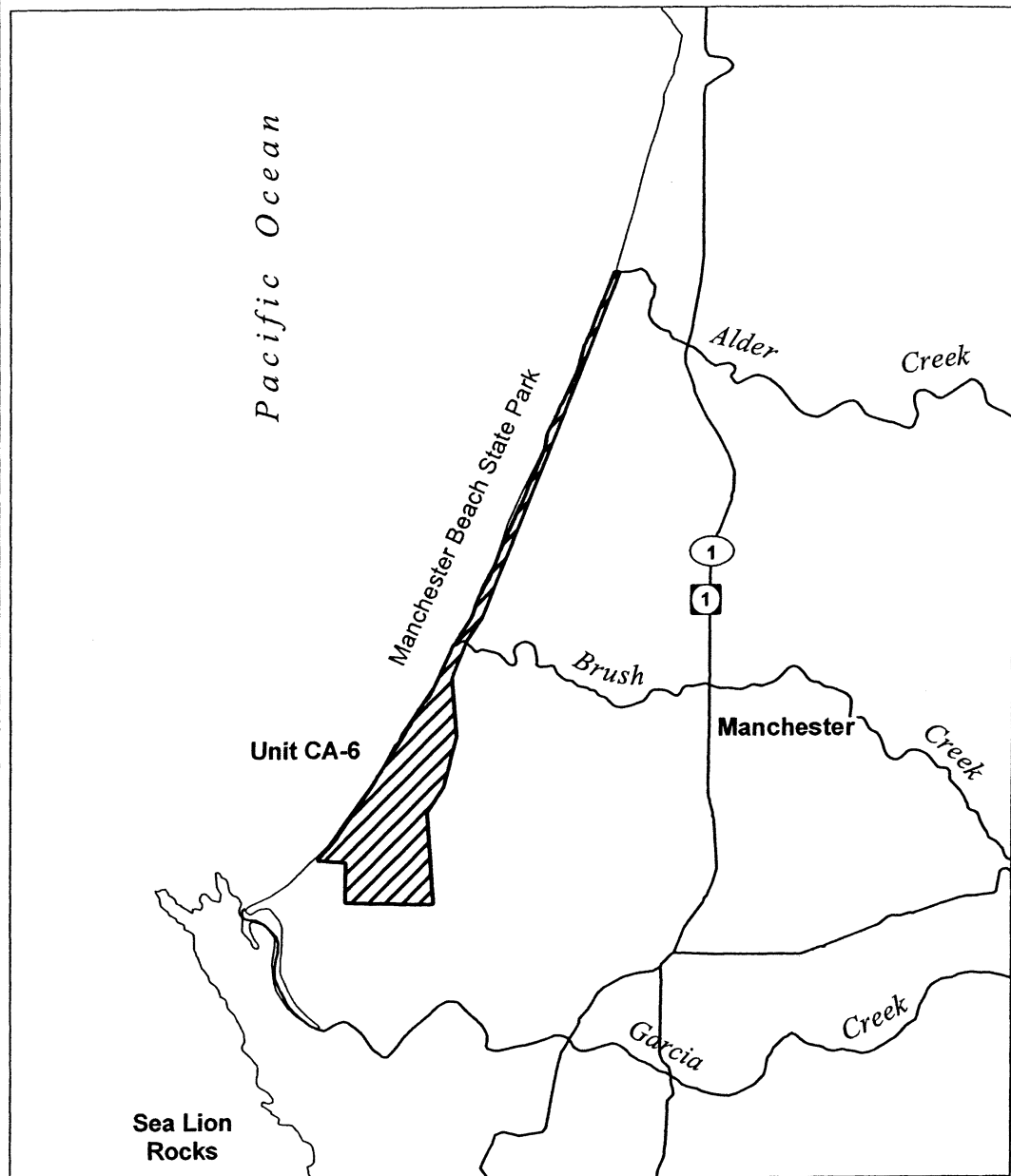
 Western Snowy Plover Proposed Critical Habitat Unit



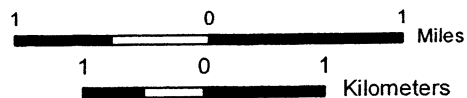


(26) Unit CA 6, Mendocino County, California.	4317313; 439669, 4316995; 439235, 4315894; 438610, 4314327; 438483,	the mean low water mark (defined at the beginning of the section) and returning to 439747, 4317317.
(i) From USGS 1:24,000 quadrangle maps Mallo Pass Creek, and Point Arena California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 439747, 4317317; 439796,	4314133; 438349, 4313805; 438391, 4313293; 438277, 4312863; 438136, 4312640; 438192, 4311851; 437426, 4311863; 437428, 4312213; 437179, 4312237; proceed generally N following	(ii) <b>Note:</b> Map of Unit CA 6 (Map M23) follows:



**Map 23. Manchester Beach (CA-6), Mendocino County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit





(27) Unit CA 8, Marin County, California.

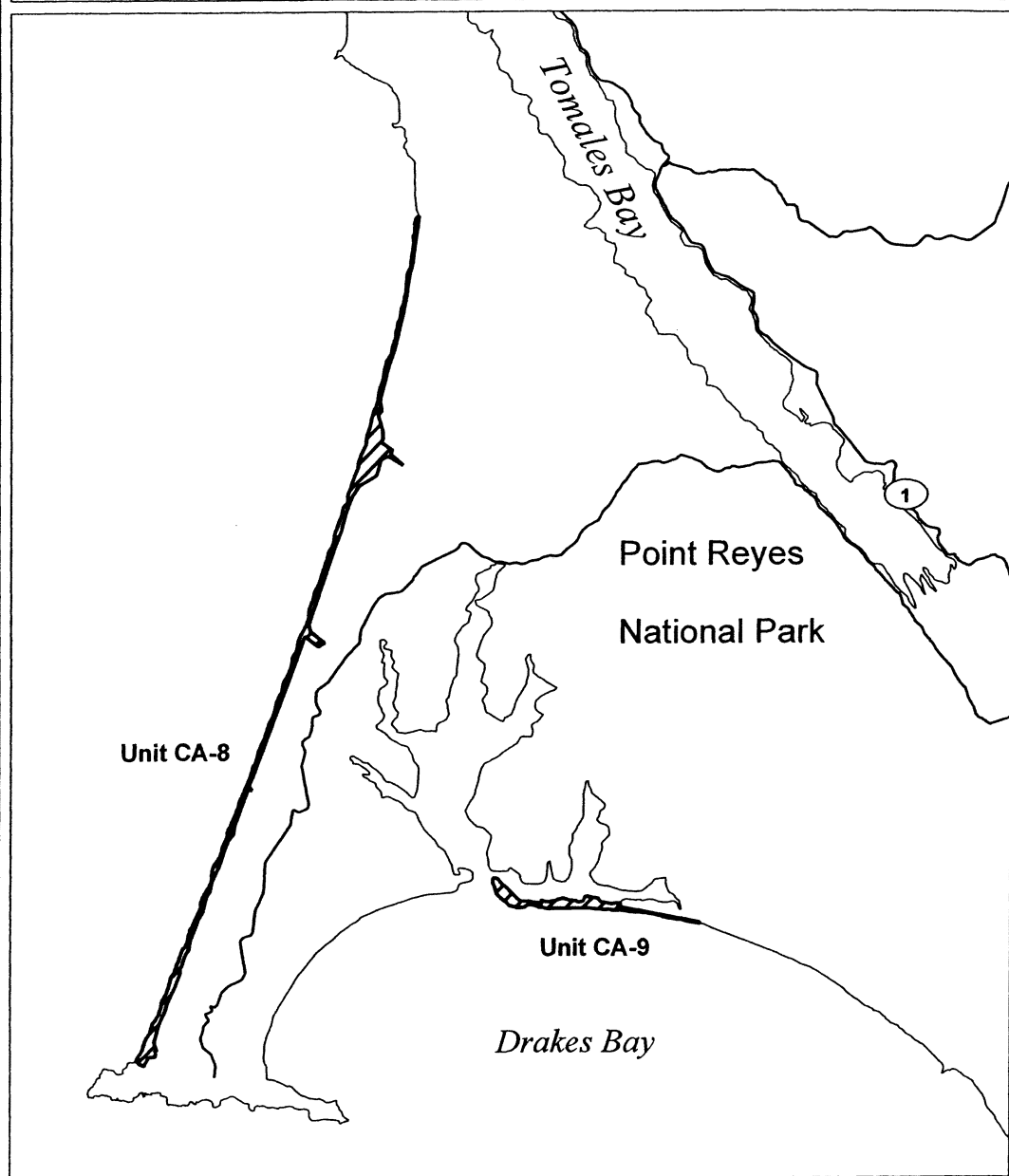
(i) From USGS 1:24,000 quadrangle maps Tomales, and Drakes Bay, California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 504572, 4222726; 504572, 4222726; 504614, 4222726; 504533, 4222176; 504474, 4221753; 504423, 4221606; 504323, 4220932; 504115, 4220064; 504015, 4219779; 503828, 4219017; 503862, 4218832; 503786, 4218734; 503872, 4218442; 503881, 4218252; 503864, 4218189; 504076, 4218038; 504054, 4217950; 504303,

4217736; 503996, 4217911; 503852, 4217840; 503755, 4217538; 503404, 4217327; 503248, 4217088; 503131, 4216783; 503063, 4216501; 502871, 4215990; 502578, 4215108; 502379, 4214536; 502420, 4214406; 502698, 4214160; 502576, 4214092; 502308, 4214311; 501984, 4213425; 501745, 4212755; 501458, 4211988; 501205, 4211284; 501258, 4211192; 501175, 4211211; 500930, 4210500; 500900, 4210342; 500793, 4210193; 500720, 4209996; 500637, 4209716; 500474, 4209346; 500433, 4209173; 500364, 4209049; 500289, 4208756; 500194,

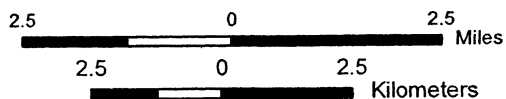
4208591; 500009, 4208106; 499997, 4207982; 499943, 4207897; 499858, 4207658; 499821, 4207609; 499817, 4207502; 499707, 4207202; 499580, 4206933; 499511, 4206729; 499411, 4206501; 499306, 4206118; 499361, 4205940; 499323, 4205958; 499335, 4205836; 499191, 4205825; 499100, 4205651; 498998, 4205696; 498933, 4205752; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 504572, 4222726.

(ii) **Note:** Map of Unit CA 8 (Map M24) follows:



**Map 24. Manchester Beach (CA-6), Mendocino County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit





(28) Unit CA 9, Marin County, California.

(i) From USGS 1:24,000 quadrangle map Drakes Bay, California, land bounded by the following UTM 10 NAD

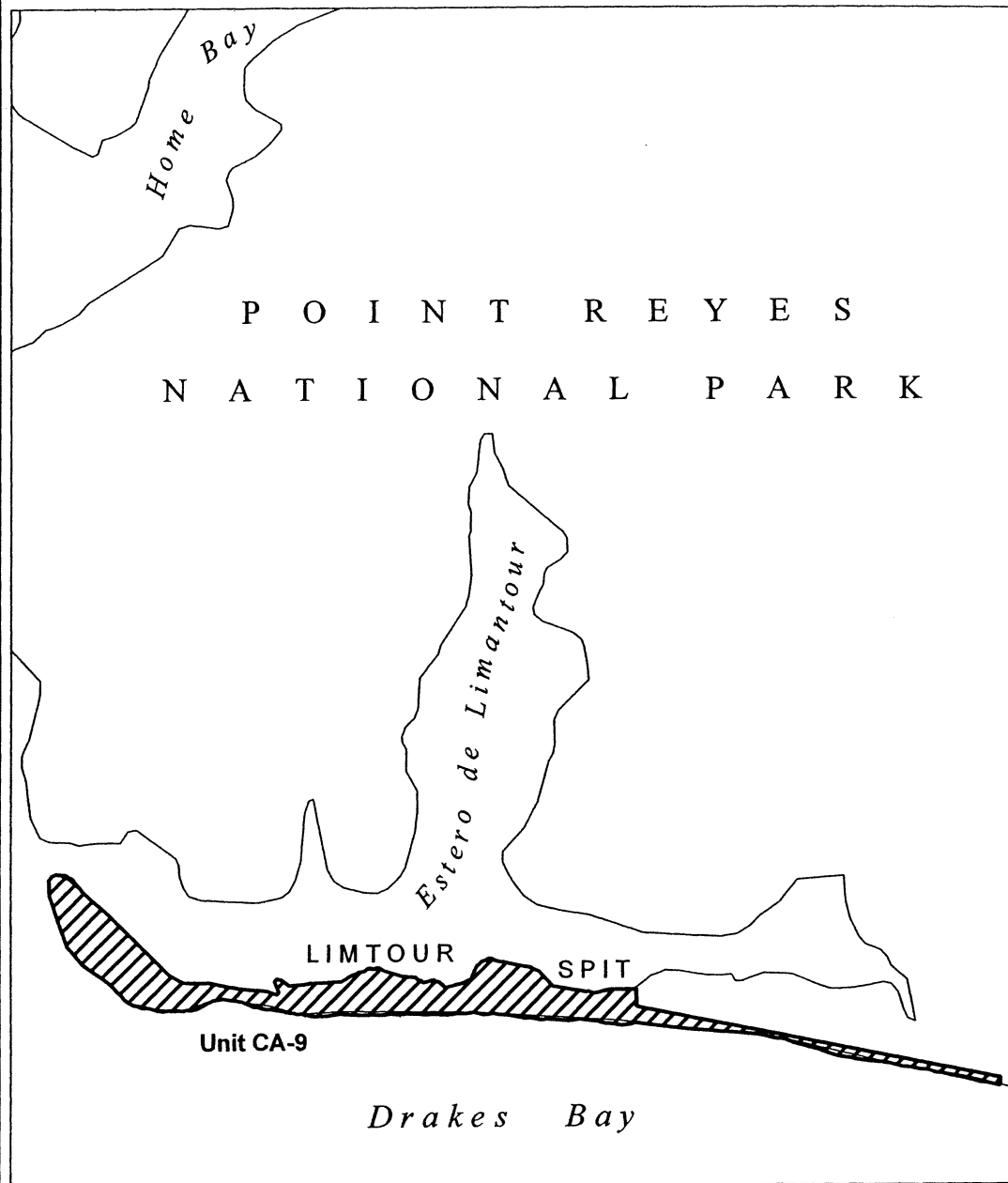
27 coordinates (E,N): 506112, 4209385; 506127, 4209403; 506148, 4209411; 506156, 4209407; 506160, 4209409; 506164, 4209409; 506175, 4209409; 506181, 4209408; 506190, 4209406; 506199, 4209398; 506212, 4209393; 506224, 4209381; 506227, 4209377; 506236, 4209364; 506250, 4209351; 506258, 4209335; 506283, 4209313; 506304, 4209295; 506356, 4209248; 506636, 4208969; 506702, 4208934; 506808, 4208934; 506886, 4208919; 506941, 4208908; 507068, 4208896; 507113, 4208881; 507123, 4208888; 507103, 4208939; 507113, 4208949; 507123, 4208947; 507125, 4208947; 507125, 4208947; 507136, 4208944; 507169, 4208919; 507257, 4208926; 507262, 4208927; 507276, 4208929; 507278, 4208928; 507398, 4208937; 507451, 4208967; 507465, 4208969; 507473, 4208976; 507475, 4208978; 507479, 4208977; 507486, 4208976; 507497, 4208980; 507504, 4208982; 507509, 4208988; 507513, 4208990; 507524, 4208995; 507539, 4208993; 507554, 4208995; 507557, 4208996; 507564, 4208994; 507571, 4208993; 507588, 4208983; 507672, 4208957; 507725, 4208955; 507734, 4208948; 507740, 4208941; 507742, 4208942; 507745, 4208943; 507754, 4208938; 507759, 4208931; 507809, 4208942; 507821, 4208933; 507826, 4208934; 507829, 4208935; 507833, 4208930; 507835, 4208929; 507838, 4208927; 507841, 4208925; 507848, 4208920; 507853, 4208911; 507860, 4208908; 507934, 4208927; 507969, 4208945; 507995, 4209003; 508011, 4209013; 508013, 4209018; 508016, 4209019; 508030, 4209025; 508047, 4209034;

508048, 4209035; 508050, 4209034; 508068, 4209029; 508081, 4209024; 508098, 4209021; 508101, 4209019; 508150, 4209009; 508228, 4208993; 508269, 4208978; 508305, 4208939; 508313, 4208932; 508315, 4208928; 508330, 4208912; 508483, 4208887; 508485, 4208887; 508500, 4208884; 508513, 4208881; 508589, 4208894; 508691, 4208894; 508700, 4208902; 508700, 4208822; 510301, 4208503; 510301, 4208469; 510275, 4208473; 510258, 4208478; 510237, 4208484; 510228, 4208485; 510202, 4208487; 510165, 4208496; 510134, 4208505; 510112, 4208510; 510072, 4208518; 510040, 4208527; 510006, 4208529; 509977, 4208540; 509963, 4208543; 509958, 4208543; 509938, 4208546; 509898, 4208553; 509862, 4208555; 509851, 4208558; 509835, 4208563; 509824, 4208566; 509802, 4208571; 509778, 4208576; 509750, 4208578; 509731, 4208579; 509680, 4208585; 509627, 4208595; 509577, 4208604; 509563, 4208609; 509555, 4208612; 509539, 4208617; 509508, 4208629; 509462, 4208642; 509448, 4208645; 509439, 4208647; 509429, 4208648; 509392, 4208661; 509385, 4208663; 509347, 4208677; 509308, 4208680; 509279, 4208688; 509258, 4208693; 509232, 4208697; 509196, 4208700; 509178, 4208701; 508902, 4208724; 508704, 4208751; 508696, 4208750; 508682, 4208746; 508665, 4208742; 508632, 4208740; 508601, 4208747; 508577, 4208748; 508560, 4208749; 508545, 4208753; 508525, 4208758; 508498, 4208761; 508450, 4208766; 508431, 4208764; 508396, 4208761; 508350, 4208763; 508347, 4208763; 508312, 4208768; 508275, 4208767; 508237, 4208774; 508216, 4208775; 508199, 4208775; 508178, 4208779; 508166, 4208782; 508150, 4208784; 508134, 4208786; 508100, 4208789;

508095, 4208789; 508065, 4208793; 508056, 4208793; 508019, 4208789; 507980, 4208798; 507948, 4208793; 507920, 4208793; 507910, 4208794; 507867, 4208789; 507821, 4208791; 507775, 4208790; 507763, 4208792; 507743, 4208793; 507736, 4208794; 507690, 4208795; 507651, 4208792; 507617, 4208793; 507611, 4208793; 507605, 4208792; 507602, 4208792; 507576, 4208790; 507547, 4208791; 507539, 4208791; 507487, 4208789; 507446, 4208791; 507393, 4208795; 507338, 4208787; 507282, 4208785; 507236, 4208792; 507235, 4208792; 507221, 4208796; 507202, 4208794; 507189, 4208799; 507180, 4208798; 507152, 4208804; 507140, 4208807; 507117, 4208812; 507104, 4208816; 507089, 4208816; 507071, 4208816; 507066, 4208818; 507040, 4208823; 507038, 4208824; 507007, 4208830; 507001, 4208833; 506975, 4208844; 506962, 4208850; 506875, 4208863; 506828, 4208855; 506821, 4208851; 506817, 4208849; 506799, 4208840; 506780, 4208829; 506759, 4208821; 506739, 4208815; 506738, 4208815; 506712, 4208815; 506711, 4208816; 506702, 4208812; 506675, 4208814; 506663, 4208811; 506659, 4208810; 506655, 4208811; 506640, 4208813; 506636, 4208814; 506624, 4208811; 506608, 4208809; 506582, 4208814; 506547, 4208824; 506518, 4208825; 506486, 4208836; 506484, 4208838; 506477, 4208840; 506457, 4208849; 506439, 4208863; 506434, 4208871; 506430, 4208877; 506423, 4208885; 506417, 4208891; 506409, 4208895; 506397, 4208910; 506367, 4208941; 506262, 4209015; 506194, 4209093; 506158, 4209192; 506115, 4209314; and returning to 506112, 4209385.

(ii) **Note:** Map of Unit CA 9 (Map M25) follows:



**Map 25. Limantour Spit (CA-9), Marin County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit

0.5 0 0.5 Miles

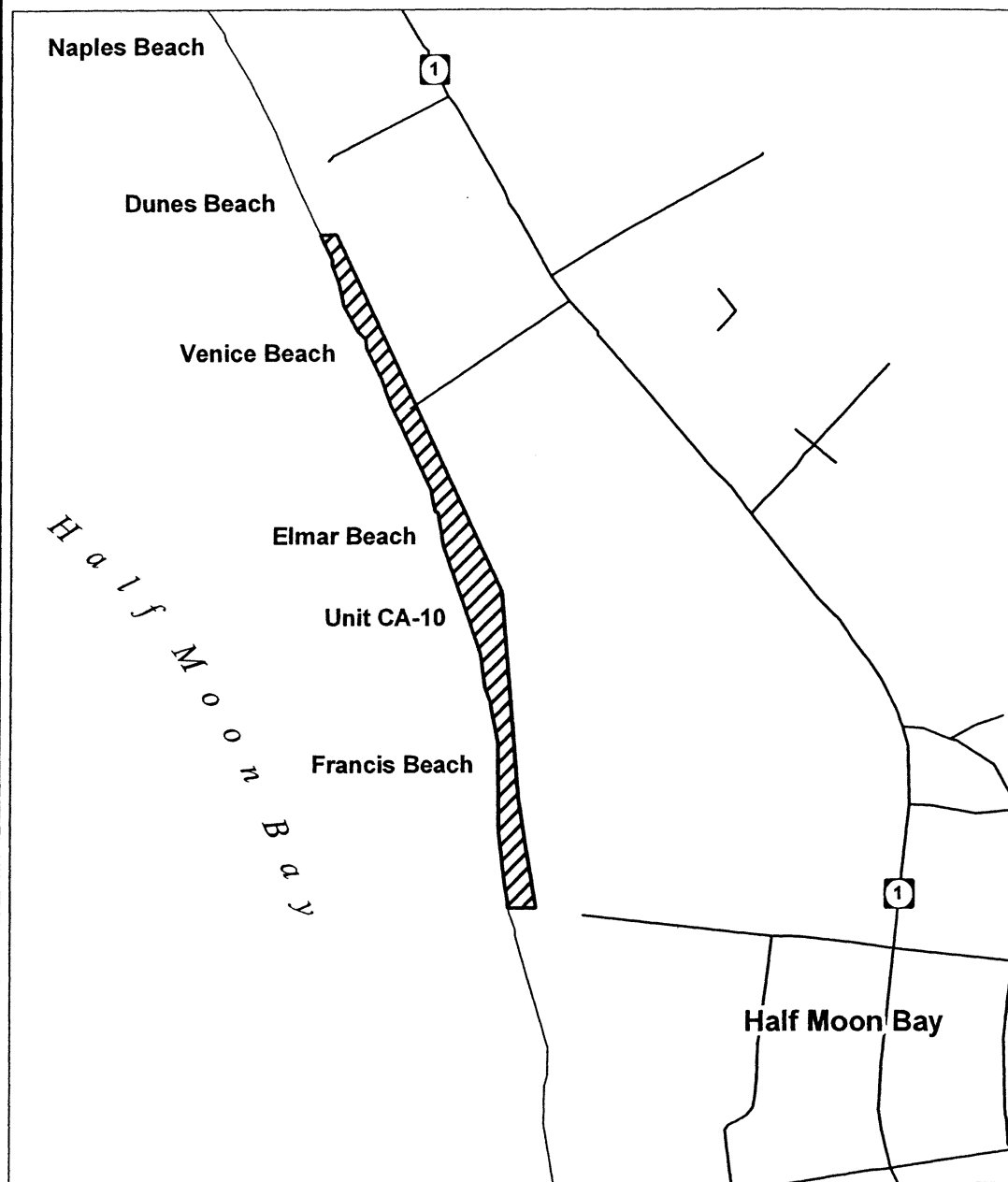
1 0 1 Kilometers





(29) Unit CA 10, San Mateo County, California.	27 coordinates (E,N): 548431, 4148414; 548480, 4148414; 548972, 4147370; 549024, 4146767; 549079, 4146435; 548995, 4146435; proceed generally N following the mean low water mark	(defined at the beginning of the section) and returning to 548431, 4148414.
(i) From USGS 1:24,000 quadrangle map Half Moon Bay, California, land bounded by the following UTM 10 NAD		(ii) <b>Note:</b> Map of Unit CA 10 (Map M26) follows:



**Map 26. Half Moon Bay (CA-10), San Mateo County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit

0.3 0 0.3 Miles  
0.5 0 0.5 Kilometers





(30) Unit CA 11A, Santa Cruz County, California.

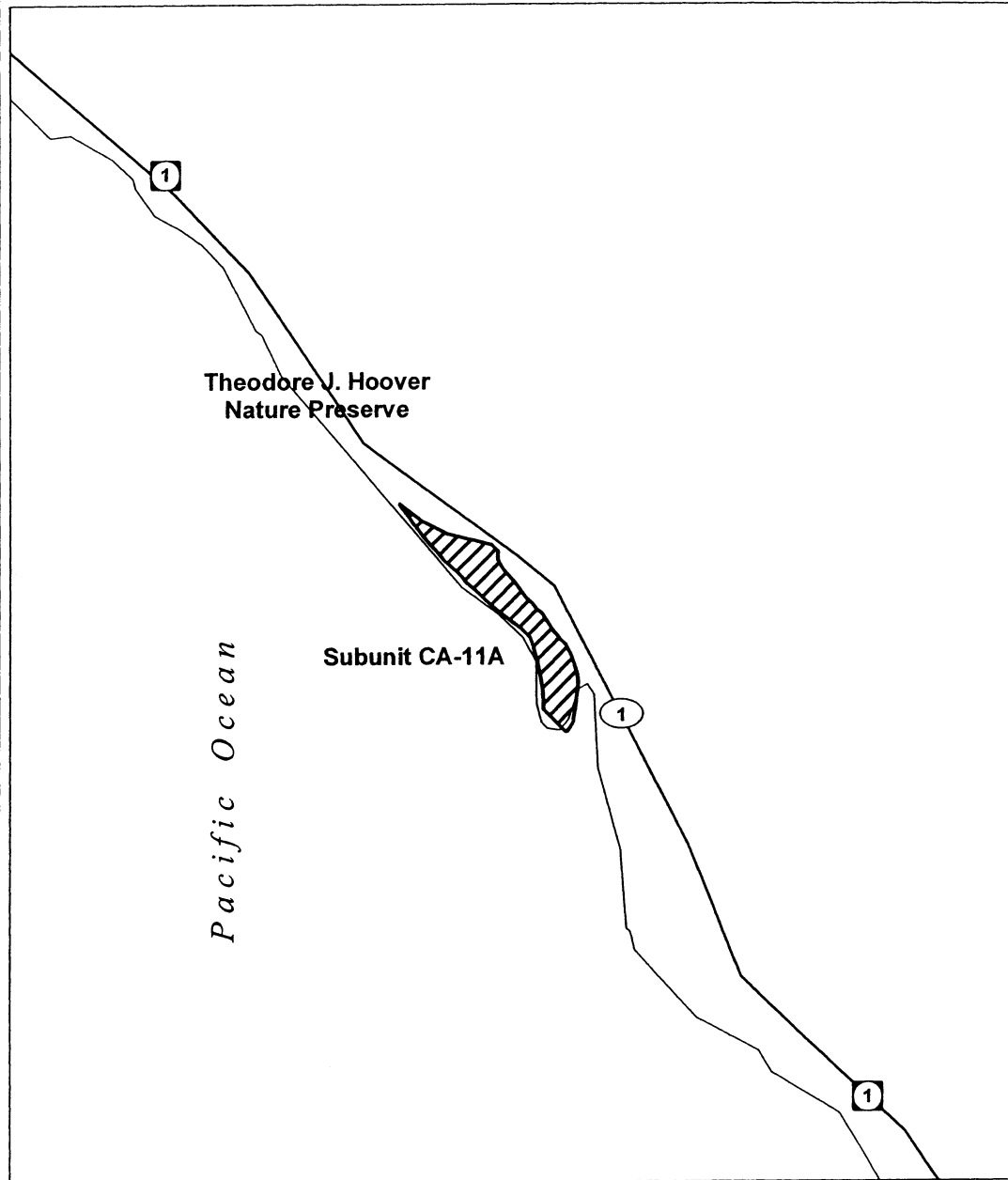
(i) From USGS 1:24,000 quadrangle map Ano Nuevo, California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 564392, 4105215; 564379, 4105194; 564373, 4105195; 564326, 4105243; 564324, 4105252; 564324, 4105263; 564324, 4105285; 564319, 4105310; 564313, 4105344; 564310, 4105355; 564303, 4105380; 564295, 4105401; 564287, 4105409; 564275, 4105421; 564247, 4105442; 564236, 4105451; 564232, 4105454;

564226, 4105459; 564212, 4105471; 564207, 4105475; 564181, 4105500; 564173, 4105507; 564153, 4105525; 564145, 4105535; 564137, 4105544; 564104, 4105574; 564086, 4105594; 564072, 4105611; 564068, 4105616; 564041, 4105649; 564025, 4105671; 564013, 4105687; 564006, 4105696; 564007, 4105697; 564059, 4105657; 564114, 4105629; 564210, 4105606; 564224, 4105591; 564223, 4105587; 564223, 4105573; 564228, 4105565; 564239, 4105548; 564250, 4105535; 564261, 4105521; 564272, 4105509;

564284, 4105491; 564300, 4105478; 564307, 4105467; 564310, 4105464; 564320, 4105457; 564333, 4105437; 564335, 4105434; 564348, 4105415; 564352, 4105411; 564363, 4105397; 564376, 4105385; 564385, 4105367; 564395, 4105341; 564401, 4105321; 564403, 4105300; 564401, 4105280; 564400, 4105273; 564397, 4105249; 564392, 4105215; returning to 564392, 4105215.

(ii) **Note:** Map of Unit CA 11A (Map M27) follows:



**Map 27. Waddell Creek Beach (CA-11A), Santa Cruz County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit

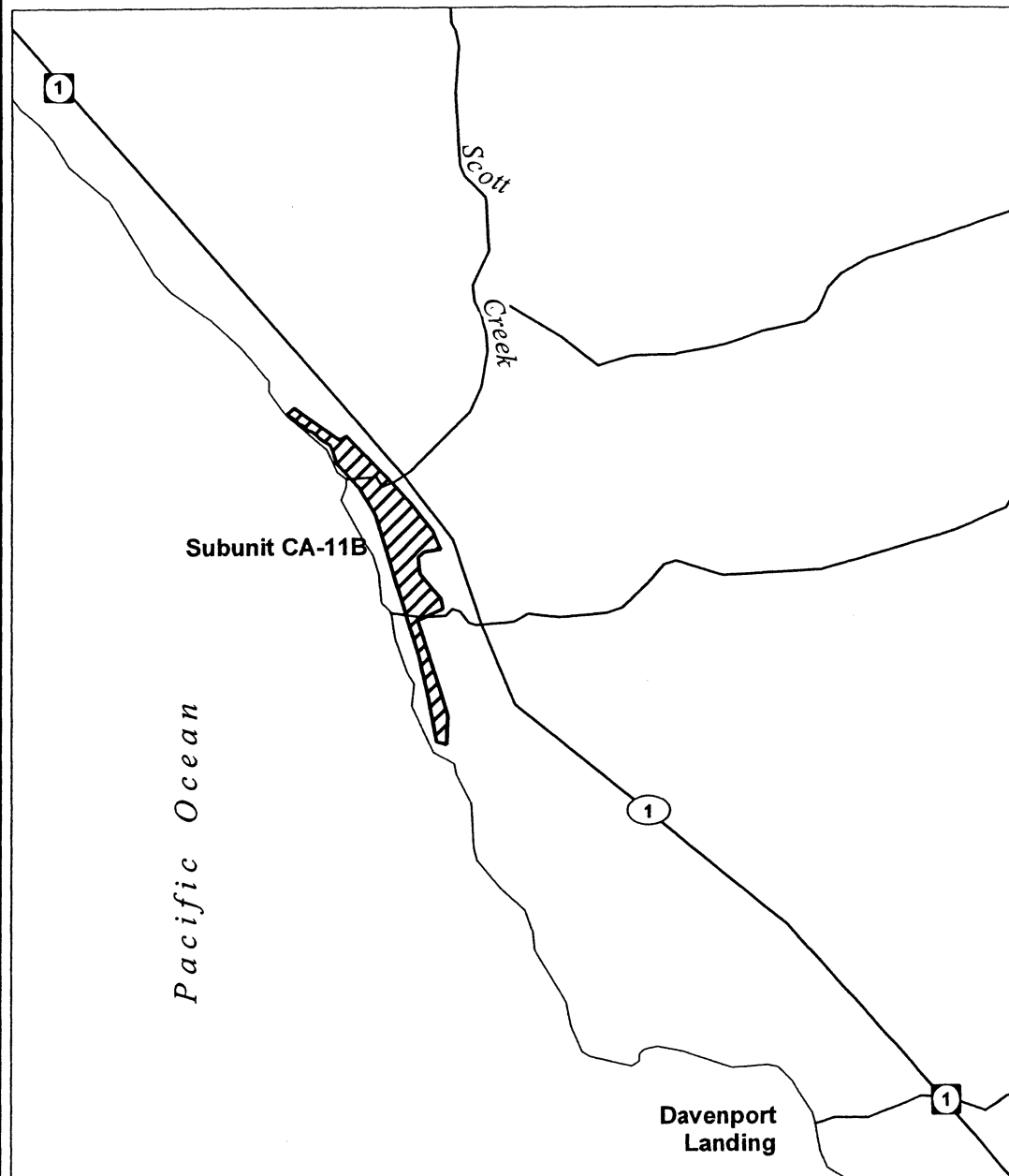
0.2 0 0.2 Miles  
0.4 0 0.4 Kilometers





(31) Unit CA 11B, Santa Cruz County, California.	568511, 4099559; 568644, 4099426; 568705, 4099359; 568766, 4099278;	568780, 4098657; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 568335, 4099623.
(i) From USGS 1:24,000 quadrangle map Davenport, California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 568335, 4099623; 568357, 4099641; 568491, 4099548;	568789, 4099227; 568743, 4099219; 568725, 4099203; 568732, 4099154; 568793, 4099079; 568797, 4099050; 568724, 4099017; 568788, 4098813; 568812, 4098739; 568810, 4098648;	(ii) <b>Note:</b> Map of Unit CA 11B (Map M28) follows:



**Map 28. Scott Creek Beach (CA-11B), Santa Cruz County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit

0.3 0 0.3 Miles

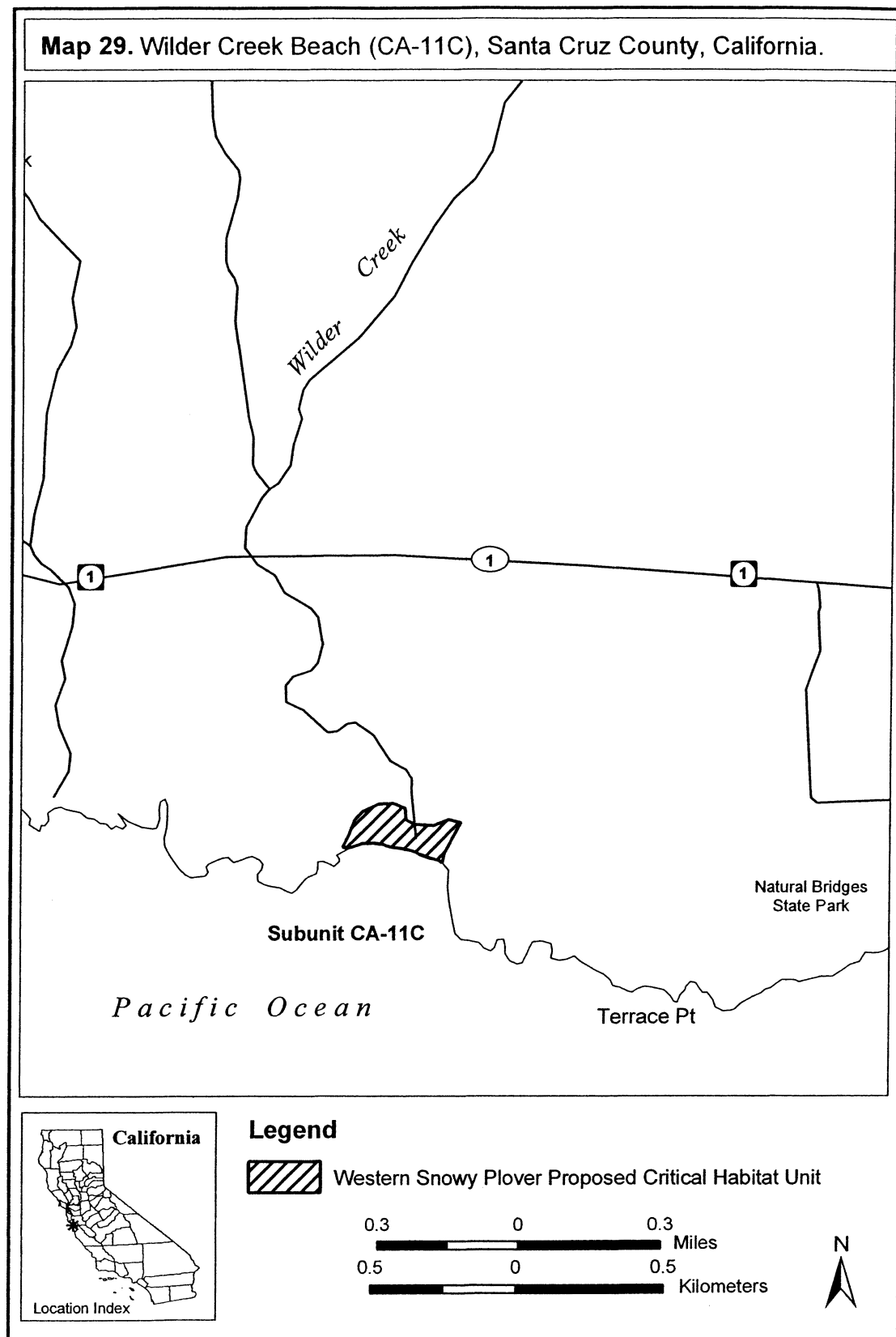
0.5 0 0.5 Kilometers





(32) Unit CA 11C, Santa Cruz County, California.	581995, 4089920; 582016, 4089973; 582043, 4090004; 582099, 4090029;	582317, 4089828; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 581976, 4089882.
(i) From USGS 1:24,000 quadrangle map Santa Cruz, California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 581976, 4089882;	582146, 4090031; 582186, 4090014; 582190, 4089975; 582220, 4089960; 582286, 4089956; 582339, 4089976; 582379, 4089965; 582325, 4089864;	(ii) <b>Note:</b> Map of Unit CA 11C (Map M29) follows:







(33) Unit CA 12B, Monterey County, California.

(i) From USGS 1:24,000 quadrangle map Moss Landing, California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 608763, 4074606; 608691, 4074563; 608670, 4074673; 608584, 4074676; 608543, 4074678; 608446, 4074735; 608439, 4074818; 608641, 4074826; 608664, 4074856; 608625, 4075263; 608614, 4075389; 608635, 4075389; 608631, 4075470; 608729, 4075467; 608787, 4075475; 608845, 4075503; 608883, 4075530; 608927, 4075571; 608956, 4075595;

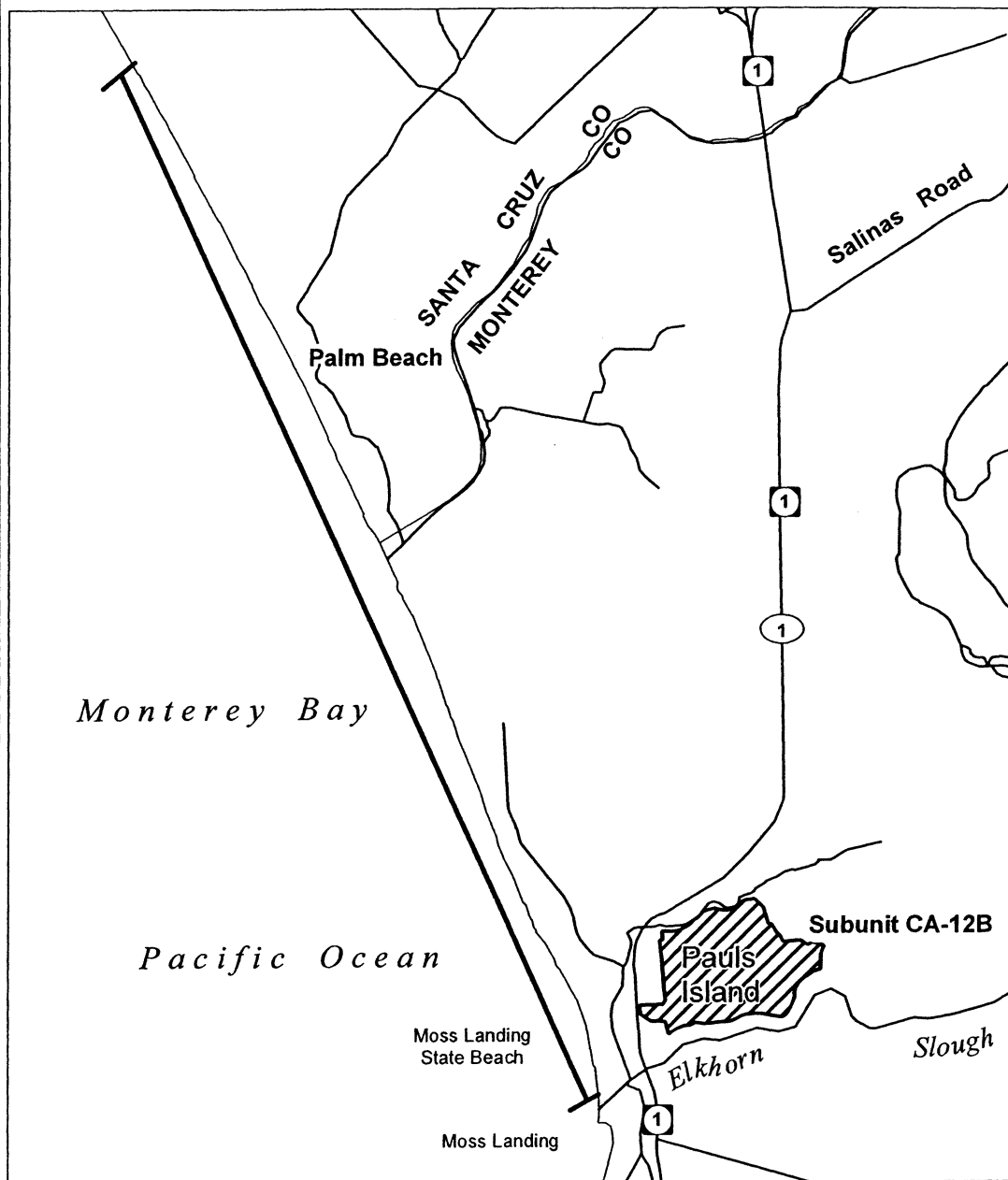
608997, 4075637; 609048, 4075659; 609093, 4075666; 609168, 4075653; 609218, 4075654; 609270, 4075672; 609344, 4075728; 609380, 4075742; 609451, 4075750; 609528, 4075677; 609566, 4075533; 609597, 4075526; 609642, 4075452; 609672, 4075419; 609693, 4075383; 609709, 4075374; 609746, 4075376; 609782, 4075377; 609817, 4075380; 609856, 4075384; 609882, 4075367; 609917, 4075348; 609958, 4075367; 609985, 4075364; 610013, 4075359; 610058, 4075336; 610029, 4075268; 610029, 4075128; 609963, 4075106; 609930, 4075084;

609878, 4075050; 609842, 4075010; 609817, 4074970; 609801, 4074919; 609802, 4074868; 609786, 4074834; 609768, 4074794; 609748, 4074758; 609727, 4074728; 609705, 4074713; 609656, 4074713; 609581, 4074728; 609517, 4074739; 609454, 4074739; 609391, 4074732; 609351, 4074722; 609319, 4074708; 609280, 4074688; 609244, 4074671; 609173, 4074665; 609007, 4074650; 608939, 4074661; 608892, 4074643; 608840, 4074635; returning to 608763, 4074606.

(ii) **Note:** Map of Unit CA 12B (Map M30) follows:



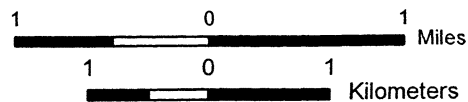
**Map 30.** Jetty Road to Aptos (CA-12A) and Elkhorn Slough Mudflat (CA-12B)  
Santa Cruz and Monterey Counties, California.



### Legend



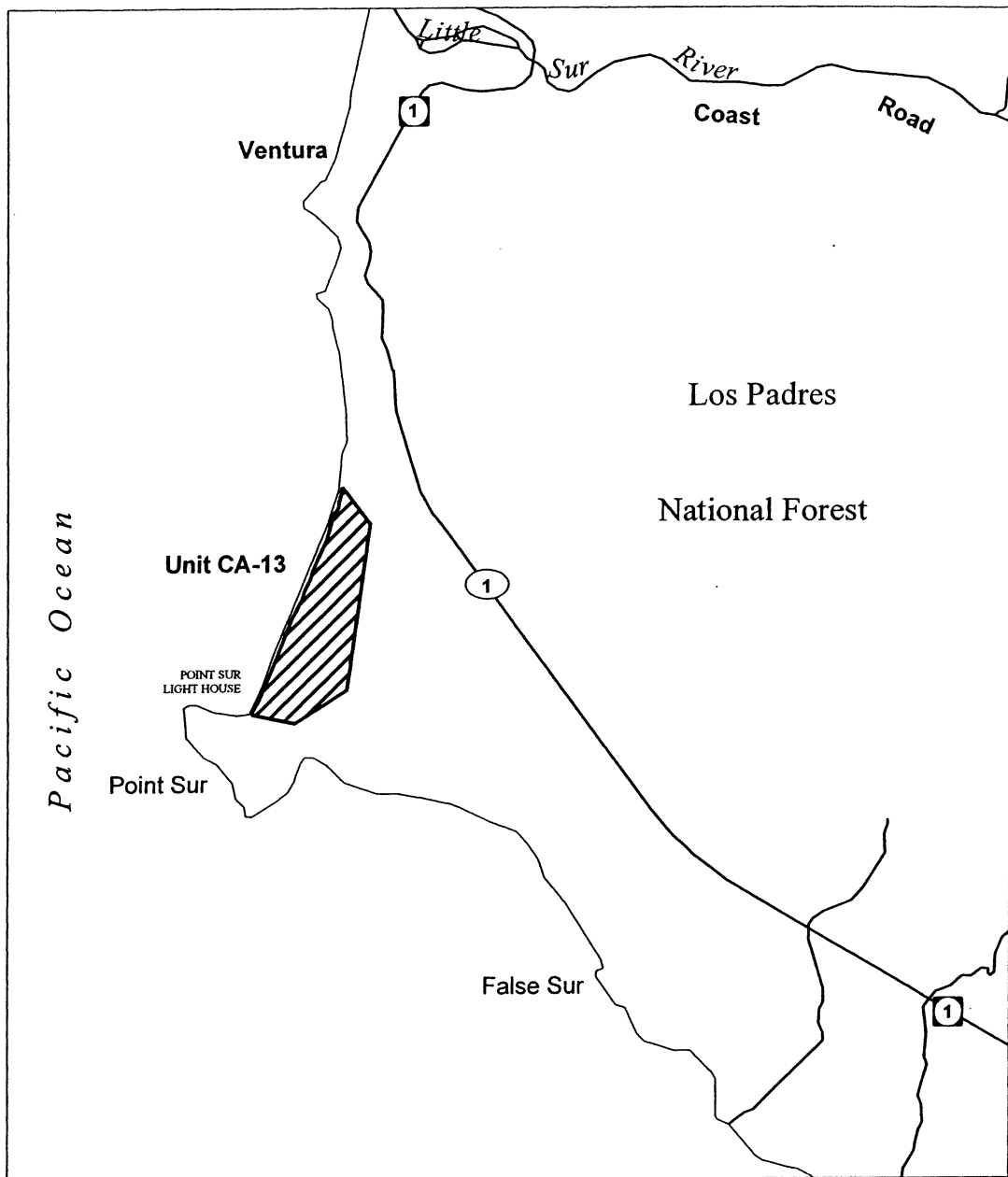
Western Snowy Plover Proposed Critical Habitat Unit





- |  |  |   |
|--|--|---|
| (34) Unit CA 13, Monterey County, California.  | coordinates (E,N): 599299, 4019363; 599421, 4019200; 599320, 4018471; 599091, 4018323; 598903, 4018365; 598903, 4018365; proceed generally N following the mean low water mark | (defined at the beginning of the section) and returning to 599299, 4019363. |
| (i) From USGS 1:24,000 quadrangle map Point Sur, California, land bounded by the following UTM 10 NAD 27 |  | (ii) <b>Note:</b> Map of Unit CA 13 (Map M31) follows:                      |



**Map 31. Point Sur Beach (CA-13), Monterey County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit

0.5 0 0.5 Miles

1 0 1 Kilometers



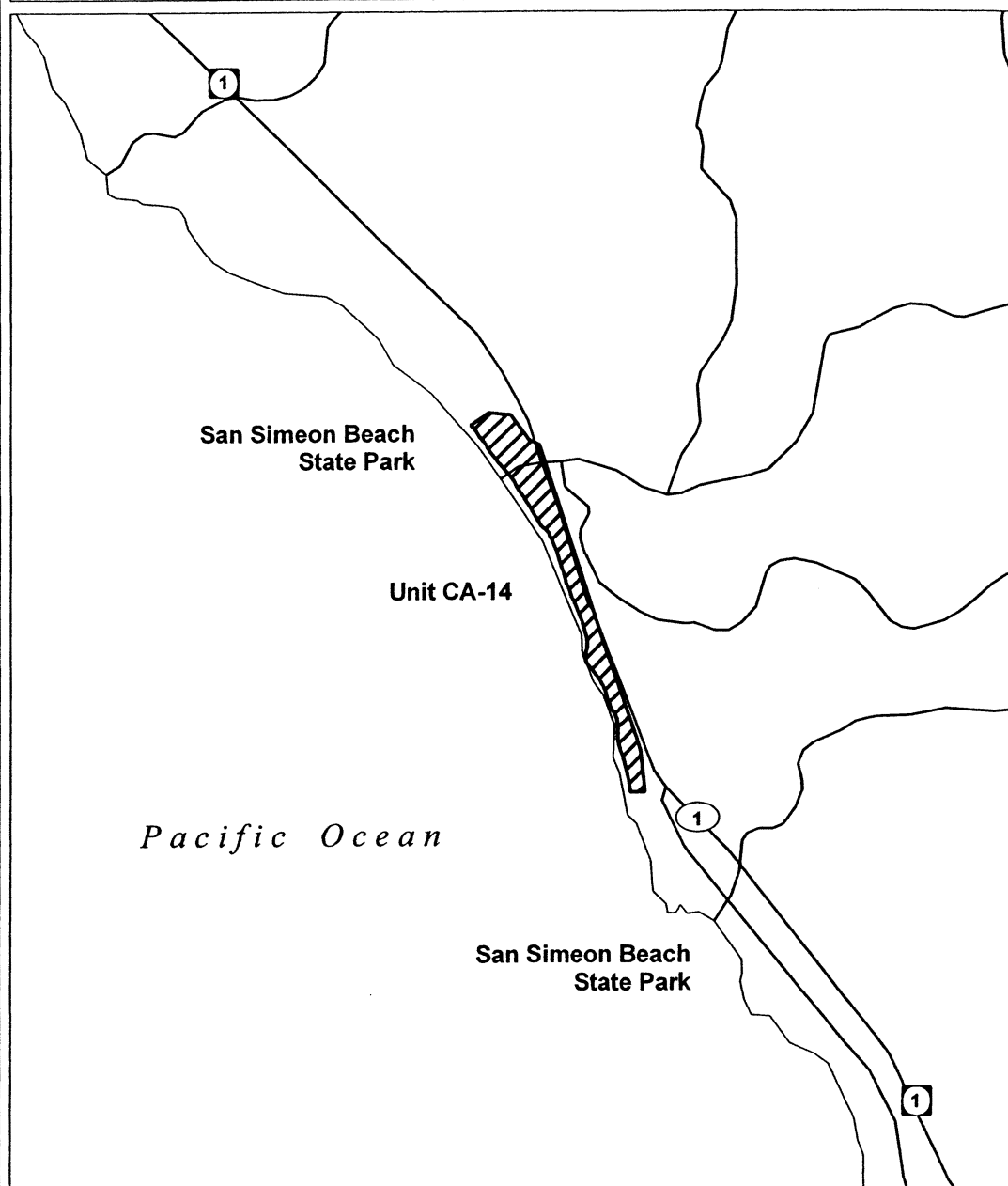


- (35) Unit CA 14, San Luis Obispo County, California.

(i) From USGS 1:24,000 quadrangle maps Pico Creek, and San Luis Obispo, California, land bounded by the following UTM 10 NAD 27 coordinates
- (E,N): 669618, 3940622; 669684, 3940666; 669759, 3940658; 669823, 3940570; 669860, 3940553; 670111, 3939799; 670221, 3939478; 670238, 3939332; 670183, 3939330; proceed generally N following the mean low
- water mark (defined at the beginning of the section) and returning to 669618, 3940622.

(ii) **Note:** Map of Unit CA 14 (Map M32) follows:



**Map 32. San Simeon Beach (CA-14), San Luis Obispo County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit

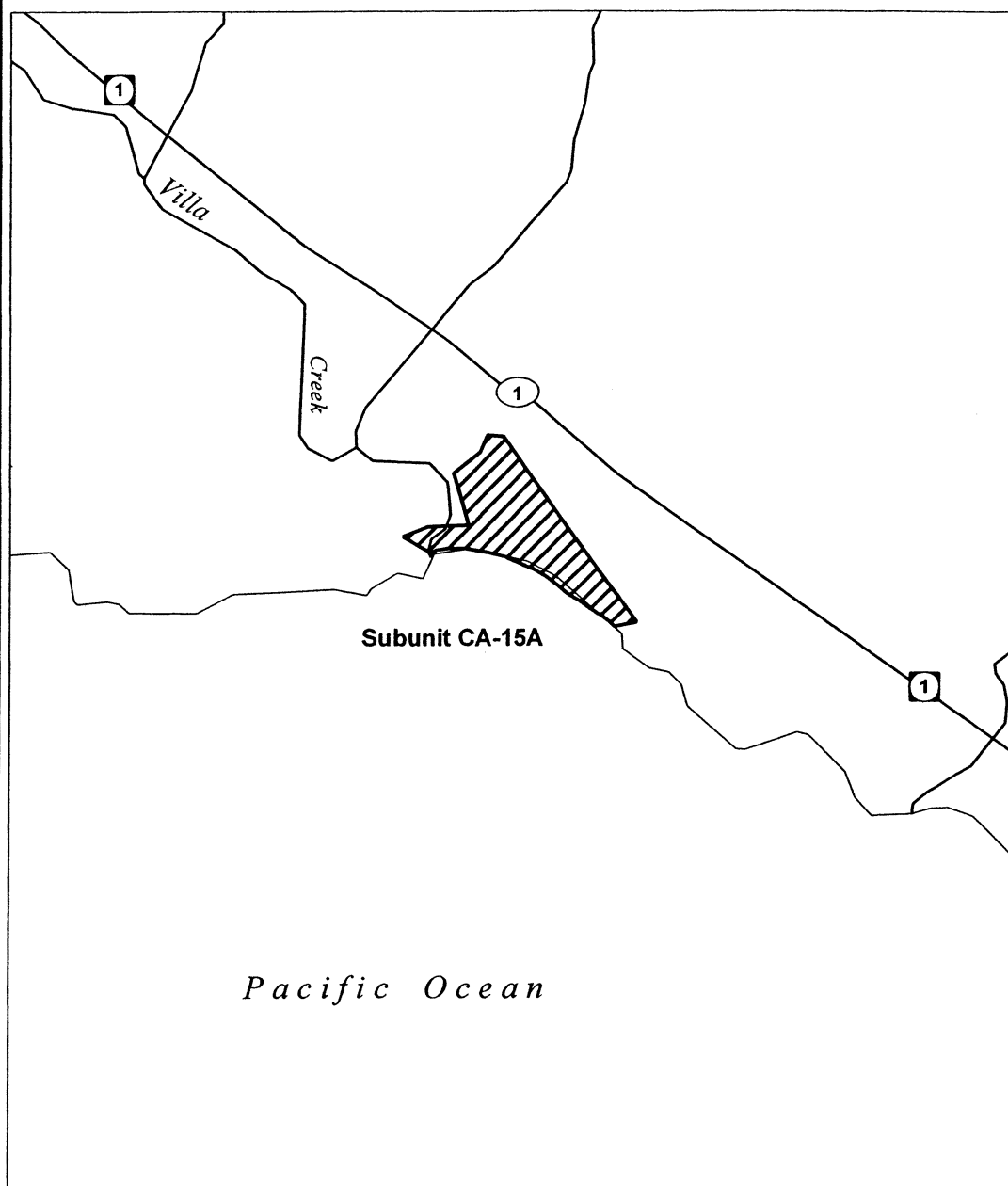
0.4 0 0.4 Miles  
0.6 0 0.6 Kilometers





(36) Unit CA 15A, San Luis Obispo County, California.	684260, 3925827; 684349, 3925831; 684316, 3925944; 684374, 3925990; 684389, 3926027; 684425, 3926024; 684453, 3925985; 684721, 3925617; 684671, 3925608; proceed generally N following the mean low water mark	(defined at the beginning of the section) and returning to 684204, 3925805.
(i) From USGS 1:24,000 quadrangle map Cayucos, California, land bounded by the following UTM 10 NAD 27 coordinates (E,N): 684204, 3925805;		(ii) <b>Note:</b> Map of Unit CA 15A (Map M33) follows:



**Map 33. Villa Creek Beach (CA-15A), San Luis Obispo County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit

0.25 0 0.25 Miles  
0.4 0 0.4 Kilometers





(37) Unit CA 18, Santa Barbara County, California.

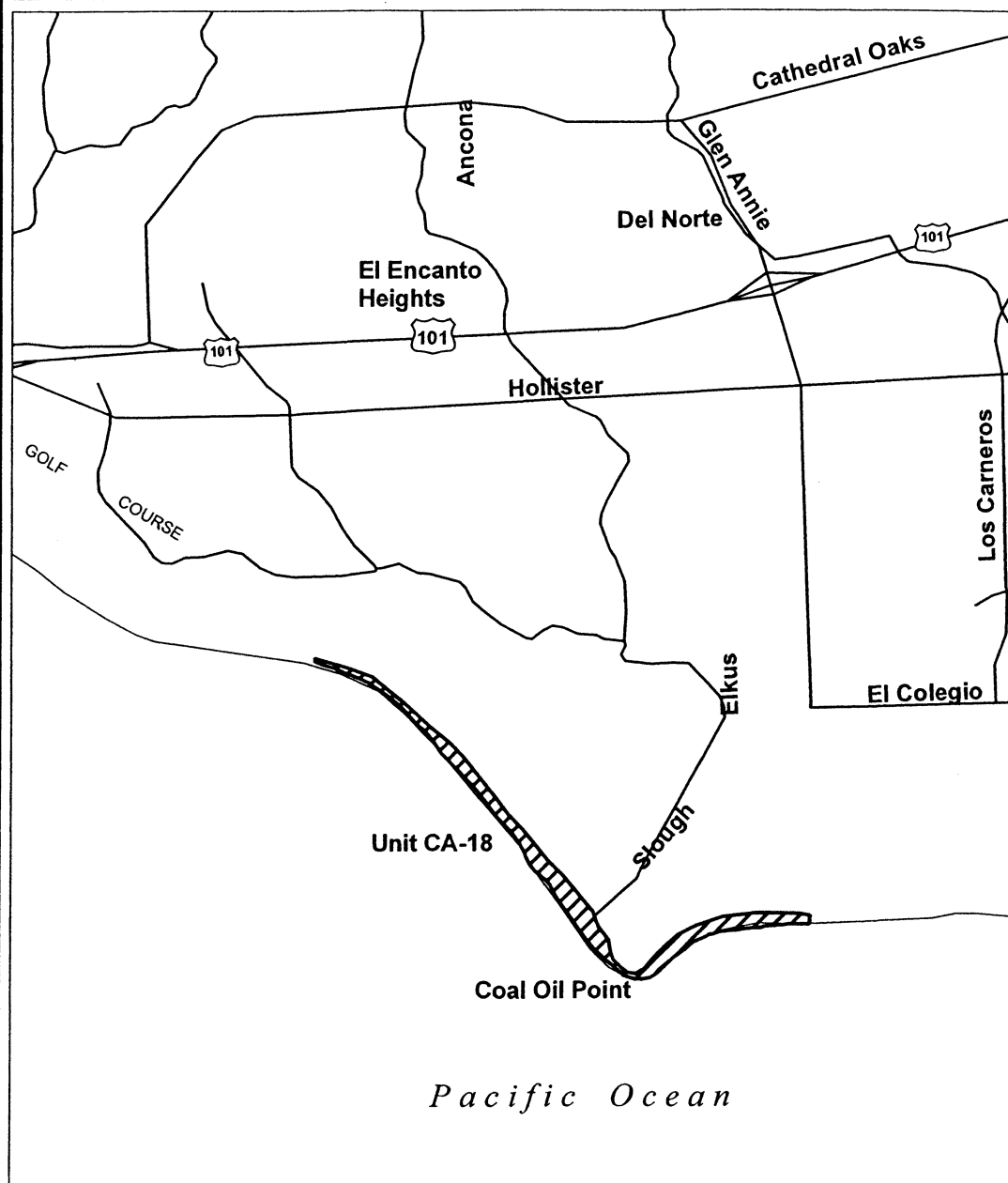
(i) From USGS 1:24,000 quadrangle maps Dos Pueblos Canyon, and Goleta, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 234194, 3812313; 234195, 3812330; 234324, 3812283; 234446, 3812230; 234583, 3812107; 234686, 3812003; 234773, 3811918; 234823,

3811862; 234938, 3811694; 235005, 3811597; 235067, 3811524; 235171, 3811381; 235232, 3811310; 235359, 3811141; 235381, 3811072; 235424, 3811010; 235428, 3810963; 235437, 3810924; 235477, 3810884; 235498, 3810866; 235532, 3810858; 235570, 3810877; 235592, 3810897; 235616, 3810922; 235681, 3810981; 235729, 3811016; 235817, 3811054; 235933,

3811084; 236074, 3811089; 236175, 3811083; 236270, 3811077; 236314, 3811067; 236310, 3811029; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 234194, 3812313.

(ii) **Note:** Map of Unit CA 18 (Map M34) follows:



**Map 34. Devereaux Beach (CA-18), Santa Barbara County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit

0.5 0 0.5 Miles

1 0 1 Kilometers





(38) Unit CA 19A, Ventura County, California.

(i) From USGS 1:24,000 quadrangle map Oxnard, California, land bounded by the following UTM 11 NAD 27

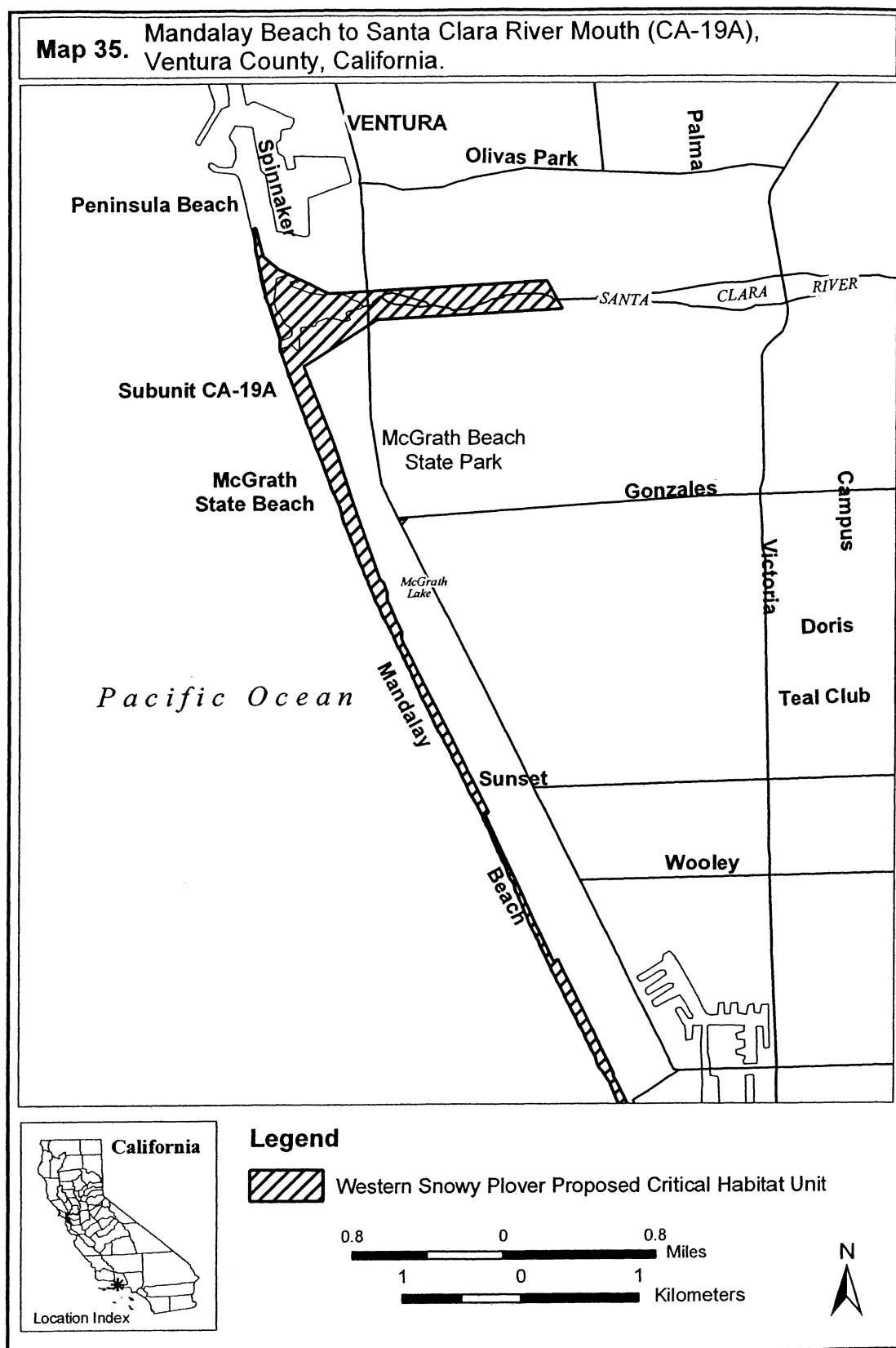
coordinates (E,N): 291536, 3790654; 291943, 3790429; 293789, 3790422; 293909, 3790178; 292342, 3790186; 291693, 3789833; 291920, 3789159; 292048, 3788658; 292238, 3788005; 292271, 3787968; 292297, 3787886; 292292, 3787826; 292351, 3787673; 292404, 3787548; 292400, 3787482; 292954, 3786197; 293048, 3785979; 293018, 3785959; 293526, 3784688; 293569, 3784701; 293823, 3784111; 293981, 3783717; 293983, 3783693; 294439, 3782668; 294526, 3782458; 294707, 3782195; 294760, 3782104; 294683, 3782108; 294704, 3782086; 294750, 3781994; 294787, 3781952; 294852, 3781838; 294879, 3781802; 294729, 3781717; 294723, 3781760; 294713, 3781782; 294699, 3781800; 294676, 3781817; 294671, 3781819; 294650, 3781827; 294631, 3781835; 294604, 3781838; 294585, 3781849; 294568, 3781857; 294557, 3781878; 294553, 3781896; 294547, 3781922; 294544, 3781941; 294543, 3781964; 294543, 3781984; 294545, 3782006; 294549, 3782032; 294548, 3782058; 294542, 3782084; 294541, 3782090; 294535, 3782125; 294526, 3782156; 294514, 3782192; 294504, 3782226; 294498, 3782242; 294495, 3782249; 294489, 3782267; 294477, 3782306; 294463, 3782352; 294448, 3782403; 294434, 3782462; 294429, 3782477; 294420, 3782507; 294402, 3782554; 294389, 3782595; 294376, 3782626; 294351, 3782682; 294331, 3782729; 294314, 3782773; 294285, 3782829; 294273, 3782855; 294256, 3782890; 294239, 3782923; 294225, 3782962; 294208, 3783001; 294187, 3783054; 294180, 3783080; 294166, 3783116; 294149, 3783150; 294139, 3783176; 294130, 3783215; 294115, 3783248; 294099, 3783272; 294085, 3783303; 294074, 3783348; 294060, 3783377; 294040, 3783411; 294010, 3783460; 293994, 3783498; 293976, 3783551; 293962, 3783594; 293942, 3783648; 293922, 3783688; 293908, 3783715; 293898, 3783734; 293878, 3783755; 293874, 3783759; 293870, 3783763; 293864, 3783782; 293863, 3783783; 293855, 3783808; 293843, 3783854; 293829, 3783891; 293814, 3783926; 293794, 3783965; 293770, 3784021;

293761, 3784045; 293741, 3784092; 293716, 3784137; 293697, 3784189; 293677, 3784240; 293652, 3784289; 293623, 3784357; 293610, 3784393; 293588, 3784443; 293572, 3784479; 293561, 3784499; 293545, 3784529; 293527, 3784573; 293506, 3784617; 293486, 3784667; 293471, 3784713; 293448, 3784768; 293427, 3784825; 293410, 3784866; 293401, 3784887; 293385, 3784930; 293360, 3784986; 293337, 3785035; 293322, 3785078; 293314, 3785099; 293304, 3785127; 293286, 3785175; 293271, 3785215; 293256, 3785255; 293254, 3785261; 293240, 3785292; 293233, 3785328; 293230, 3785340; 293229, 3785342; 293224, 3785361; 293214, 3785382; 293213, 3785384; 293203, 3785400; 293191, 3785431; 293176, 3785478; 293174, 3785482; 293171, 3785492; 293158, 3785530; 293149, 3785548; 293144, 3785558; 293142, 3785562; 293120, 3785619; 293106, 3785651; 293096, 3785681; 293092, 3785691; 293084, 3785711; 293070, 3785746; 293066, 3785755; 293066, 3785757; 293055, 3785792; 293042, 3785823; 293023, 3785874; 293004, 3785916; 292989, 3785962; 292970, 3786005; 292947, 3786059; 292927, 3786101; 292916, 3786121; 292910, 3786135; 292902, 3786150; 292885, 3786181; 292872, 3786223; 292862, 3786258; 292848, 3786284; 292840, 3786303; 292825, 3786340; 292816, 3786363; 292800, 3786391; 292798, 3786395; 292792, 3786403; 292786, 3786410; 292785, 3786412; 292782, 3786419; 292775, 3786441; 292774, 3786443; 292764, 3786469; 292755, 3786493; 292725, 3786558; 292709, 3786595; 292709, 3786598; 292697, 3786625; 292681, 3786656; 292680, 3786658; 292676, 3786663; 292670, 3786673; 292666, 3786678; 292655, 3786700; 292654, 3786703; 292642, 3786740; 292634, 3786761; 292631, 3786772; 292628, 3786779; 292618, 3786802; 292609, 3786822; 292598, 3786846; 292590, 3786864; 292588, 3786870; 292581, 3786889; 292575, 3786906; 292568, 3786919; 292563, 3786931; 292562, 3786932; 292553, 3786951; 292552, 3786953; 292532, 3787000; 292512, 3787049; 292505, 3787071; 292494, 3787099; 292481, 3787132; 292478, 3787139; 292470, 3787163; 292452, 3787219; 292430, 3787265; 292425, 3787276; 292416, 3787297; 292400, 3787337; 292384, 3787381;

292380, 3787388; 292371, 3787404; 292371, 3787405; 292364, 3787417; 292343, 3787473; 292338, 3787485; 292337, 3787488; 292321, 3787526; 292297, 3787585; 292296, 3787588; 292295, 3787588; 292272, 3787635; 292243, 3787694; 292216, 3787767; 292196, 3787815; 292177, 3787876; 292159, 3787920; 292157, 3787926; 292153, 3787937; 292146, 3787962; 292136, 3787992; 292124, 3788022; 292122, 3788027; 292115, 3788043; 292095, 3788098; 292090, 3788116; 292077, 3788155; 292076, 3788157; 292076, 3788158; 292057, 3788206; 292055, 3788211; 292053, 3788216; 292048, 3788237; 292038, 3788270; 292023, 3788314; 292018, 3788330; 292002, 3788380; 291991, 3788411; 291986, 3788424; 291974, 3788463; 291968, 3788483; 291953, 3788529; 291952, 3788534; 291947, 3788560; 291943, 3788587; 291933, 3788636; 291931, 3788640; 291916, 3788679; 291897, 3788731; 291875, 3788782; 291856, 3788846; 291832, 3788928; 291818, 3788975; 291818, 3788976; 291813, 3788995; 291807, 3789010; 291807, 3789010; 291792, 3789048; 291766, 3789118; 291751, 3789171; 291739, 3789208; 291738, 3789212; 291717, 3789279; 291703, 3789322; 291696, 3789346; 291681, 3789395; 291671, 3789432; 291671, 3789434; 291665, 3789455; 291661, 3789464; 291652, 3789484; 291510, 3789962; 291510, 3789967; 291507, 3790007; 291508, 3790019; 291510, 3790052; 291509, 3790065; 291508, 3790095; 291505, 3790118; 291499, 3790142; 291490, 3790179; 291482, 3790214; 291470, 3790249; 291468, 3790254; 291456, 3790296; 291447, 3790332; 291431, 3790369; 291421, 3790398; 291419, 3790406; 291417, 3790413; 291414, 3790433; 291406, 3790485; 291387, 3790625; 291374, 3790687; 291368, 3790723; 291362, 3790759; 291358, 3790792; 291351, 3790831; 291349, 3790865; 291348, 3790900; 291344, 3790941; 291340, 3790980; 291336, 3791004; 291335, 3791012; 291362, 3791013; 291410, 3790772; 291536, 3790654; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 291536, 3790654.

(ii) **Note:** Map of Unit CA 19A (Map M35) follows:







(39) Unit CA 19B, Ventura County, California.

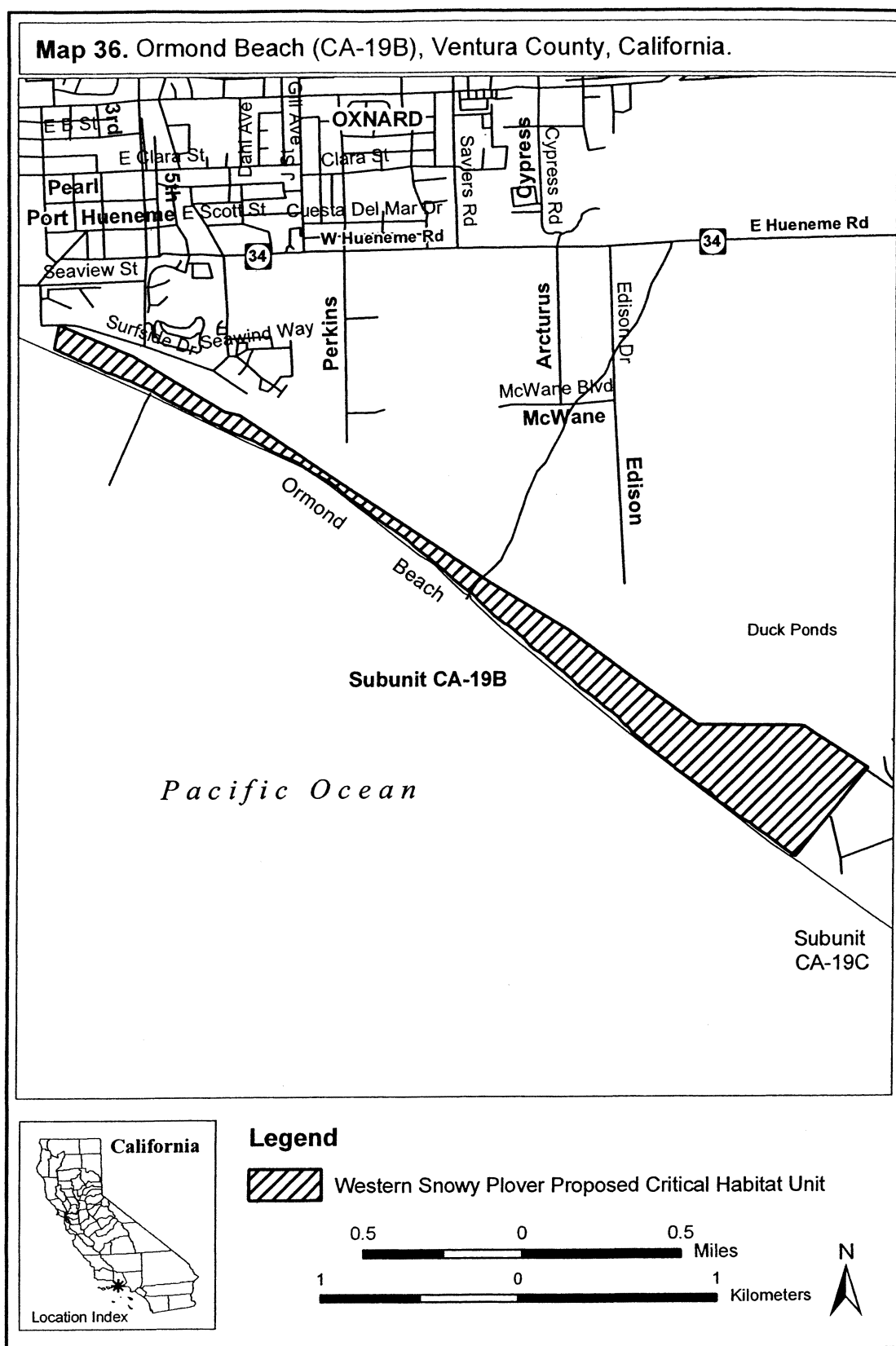
(i) From USGS 1:24,000 quadrangle maps Oxnard, and Point Magu, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 301219, 3777693; 300831, 3777265; 300825, 3777270; 300806, 3777284; 300783, 3777305; 300751, 3777332; 300731, 3777349; 300698, 3777377; 300669, 3777400; 300643, 3777423; 300614, 3777448; 300567, 3777480; 300539, 3777504; 300514, 3777529; 300495, 3777545; 300468, 3777563; 300449, 3777582; 300422, 3777615; 300388, 3777639; 300367, 3777657; 300344, 3777676; 300326, 3777689; 300306, 3777706; 300289, 3777719; 300273, 3777733; 300255, 3777748; 300226, 3777778; 300207, 3777796; 300191, 3777809; 300174, 3777824; 300156, 3777841; 300139, 3777858; 300117, 3777878; 300081, 3777914; 300048, 3777944; 300039, 3777958; 300028, 3777971; 300018, 3777978; 299997, 3778002; 299978, 3778030; 299954, 3778052; 299937, 3778067; 299917, 3778082; 299885,

3778114; 299854, 3778146; 299827, 3778167; 299800, 3778187; 299773, 3778211; 299761, 3778227; 299739, 3778248; 299711, 3778277; 299687, 3778297; 299657, 3778325; 299637, 3778346; 299615, 3778366; 299579, 3778392; 299550, 3778418; 299529, 3778447; 299511, 3778468; 299494, 3778483; 299474, 3778503; 299455, 3778521; 299431, 3778534; 299401, 3778560; 299376, 3778579; 299357, 3778601; 299334, 3778630; 299313, 3778649; 299295, 3778670; 299271, 3778701; 299262, 3778707; 299243, 3778722; 299213, 3778747; 299194, 3778765; 299174, 3778786; 299144, 3778817; 299117, 3778840; 299089, 3778867; 299053, 3778901; 299018, 3778932; 298985, 3778961; 298957, 3778991; 298930, 3779014; 298897, 3779041; 298864, 3779067; 298836, 3779090; 298801, 3779115; 298770, 3779144; 298729, 3779181; 298683, 3779218; 298660, 3779236; 298620, 3779280; 298584, 3779310; 298559, 3779328; 298505, 3779359; 298474, 3779379; 298431, 3779413; 298396, 3779434; 298365, 3779448; 298317,

3779471; 298289, 3779490; 298266, 3779506; 298243, 3779519; 298216, 3779537; 298200, 3779545; 298189, 3779550; 298164, 3779563; 298122, 3779582; 298080, 3779603; 298042, 3779629; 298000, 3779648; 297961, 3779678; 297913, 3779700; 297864, 3779729; 297819, 3779758; 297771, 3779784; 297727, 3779819; 297691, 3779838; 297656, 3779855; 297613, 3779877; 297567, 3779900; 297534, 3779917; 297494, 3779932; 297453, 3779953; 297404, 3779980; 297359, 3780001; 297309, 3780030; 297242, 3780065; 297270, 3780182; 297633, 3780001; 298075, 3779695; 298150, 3779675; 299371, 3778748; 299746, 3778489; 300378, 3777964; 300888, 3777929; 300911, 3777924; 300923, 3777917; 300936, 3777908; 300956, 3777892; 301219, 3777693; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 301219, 3777693.

(ii) **Note:** Map of Unit CA 19B (Map M36) follows:







(40) Unit CA 19D, Ventura County, California.

(i) From USGS 1:24,000 quadrangle map Point Magu, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 309410, 3773725; 309460, 3773796; 309560, 3773719; 309596, 3773763; 309661, 3773726; 309714, 3773654; 309836, 3773503;

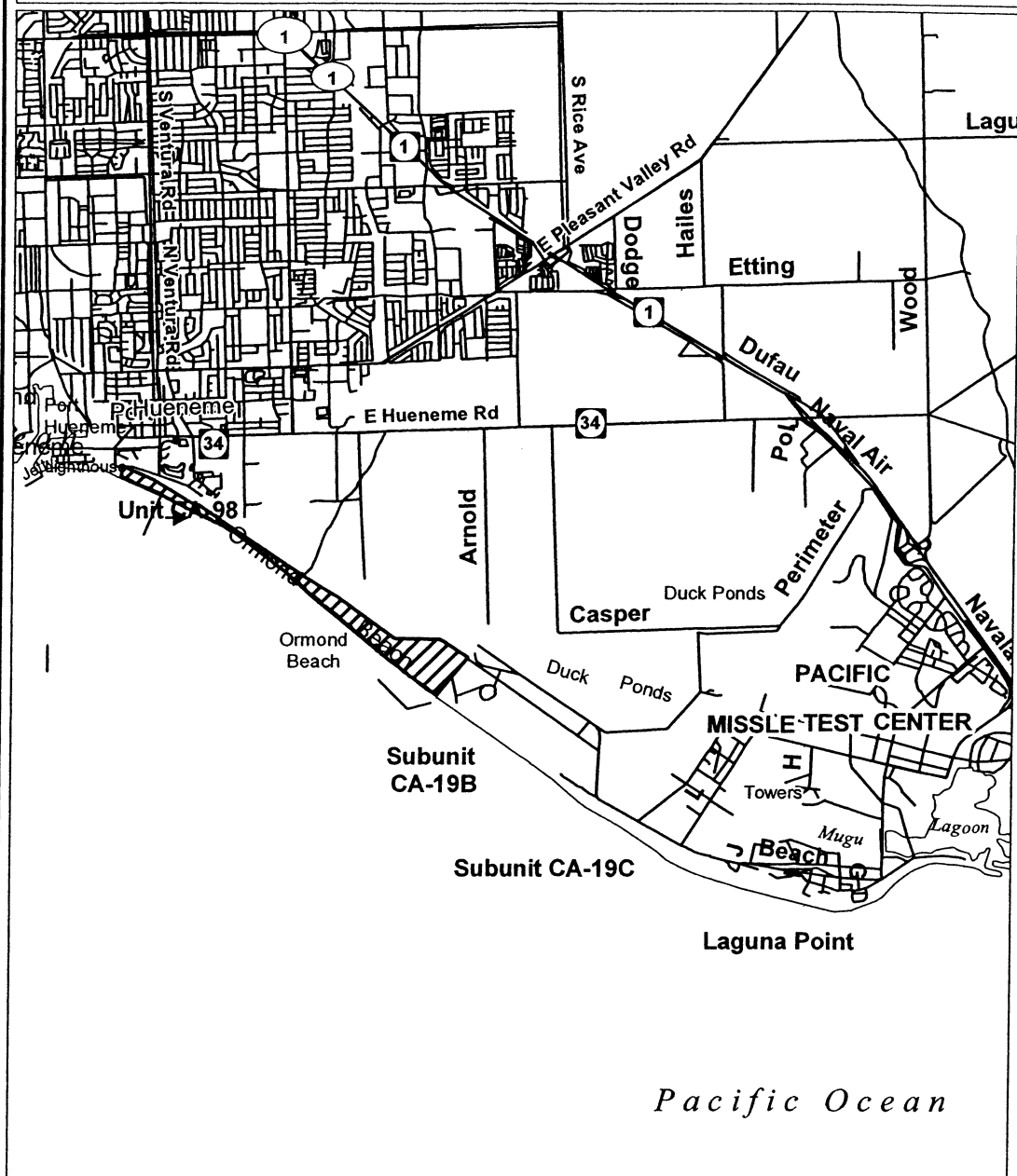
309847, 3773468; 309815, 3773441; 309804, 3773452; 309784, 3773467; 309774, 3773475; 309772, 3773477; 309751, 3773495; 309739, 3773506; 309712, 3773523; 309698, 3773533; 309676, 3773549; 309673, 3773550; 309661, 3773558; 309630, 3773578; 309589, 3773607; 309578, 3773614; 309530, 3773650; 309488, 3773677;

309462, 3773692; 309445, 3773703; 309433, 3773711; 309410, 3773725; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 309410, 3773725.

(ii) **Note:** Map of Unit CA 19D (Map M37) follows:

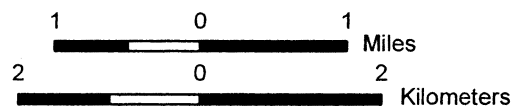


**Map 37.** Magu Lagoon, South (CA-19D),  
Ventura County, California.



**Legend**

 Western Snowy Plover Proposed Critical Habitat Unit





(41) Unit CA 20, Los Angeles County, California.

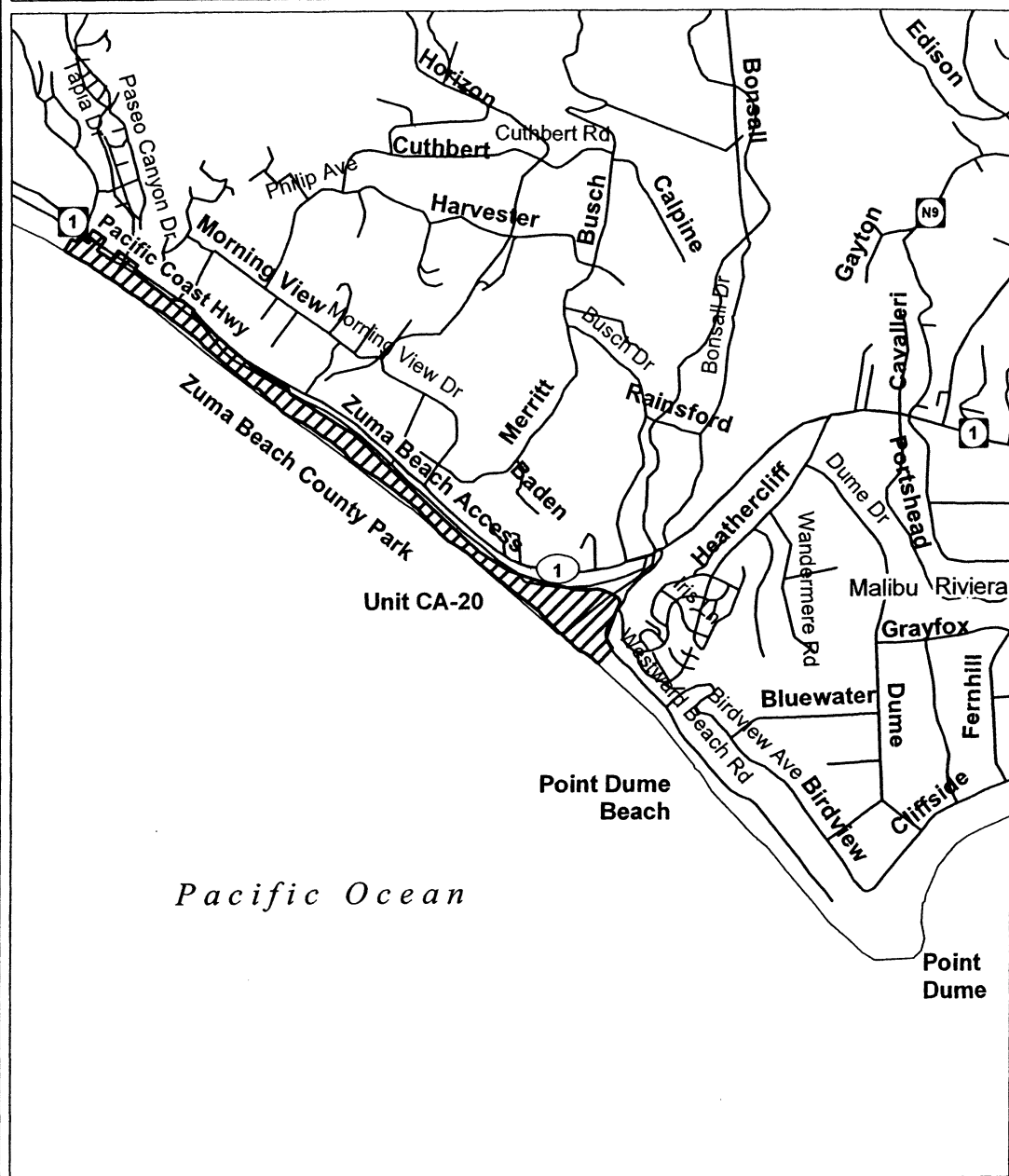
(i) From USGS 1:24,000 quadrangle map Point Dume, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 329965, 3766877; 329924, 3766830; 329985, 3766786; 330017, 3766822; 330095, 3766754; 330094, 3766751; 330084, 3766734; 330081, 3766721; 330155, 3766656; 330233, 3766591; 330253, 3766588; 330272, 3766589; 330283, 3766586; 330337, 3766538; 330324, 3766526; 330377, 3766467; 330388, 3766467; 330428, 3766419; 330503, 3766346; 330597, 3766260; 330733, 3766164; 330734, 3766150; 330742, 3766140; 330970, 3765974; 331003, 3765952; 331025, 3765933; 331045, 3765912; 331281, 3765663; 331539, 3765394; 331669, 3765298; 331791, 3765248; 331956, 3765199; 331981, 3765198; 332021, 3765195; 332052, 3765196; 332076, 3765189; 332121, 3765165; 332140, 3765152; 332146, 3765142; 332147, 3765126; 332122, 3765074; 332087, 3765013; 332081, 3764993; 332081, 3764972; 332083, 3764966; 332099, 3764935; 332103, 3764929; 332037, 3764863; 332019, 3764880; 332003, 3764895; 331988, 3764908; 331973, 3764917; 331965, 3764922;

331957, 3764927; 331930, 3764951; 331913, 3764969; 331904, 3764979; 331897, 3764986; 331886, 3764999; 331883, 3765003; 331882, 3765004; 331876, 3765009; 331858, 3765025; 331836, 3765051; 331813, 3765078; 331797, 3765098; 331783, 3765116; 331774, 3765125; 331755, 3765144; 331738, 3765158; 331724, 3765168; 331683, 3765204; 331643, 3765243; 331640, 3765246; 331605, 3765278; 331589, 3765293; 331588, 3765294; 331564, 3765319; 331527, 3765350; 331486, 3765395; 331456, 3765417; 331433, 3765432; 331404, 3765452; 331401, 3765454; 331400, 3765455; 331389, 3765467; 331365, 3765493; 331361, 3765497; 331325, 3765542; 331299, 3765572; 331275, 3765604; 331248, 3765627; 331243, 3765631; 331212, 3765659; 331178, 3765688; 331147, 3765713; 331108, 3765746; 331070, 3765774; 331036, 3765797; 331035, 3765798; 331012, 3765818; 331009, 3765820; 330986, 3765838; 330962, 3765871; 330937, 3765897; 330904, 3765925; 330878, 3765944; 330853, 3765961; 330827, 3765983; 330795, 3766008; 330764, 3766026; 330752, 3766032; 330739, 3766039; 330732, 3766043; 330711, 3766057; 330706, 3766060; 330681, 3766090;

330679, 3766091; 330667, 3766104; 330663, 3766107; 330653, 3766117; 330644, 3766126; 330643, 3766127; 330629, 3766143; 330604, 3766172; 330587, 3766179; 330579, 3766181; 330573, 3766186; 330368, 3766380; 330365, 3766384; 330348, 3766403; 330328, 3766422; 330321, 3766428; 330279, 3766466; 330236, 3766502; 330207, 3766528; 330173, 3766550; 330136, 3766569; 330105, 3766597; 330085, 3766611; 330070, 3766624; 330023, 3766660; 330022, 3766661; 330018, 3766664; 330010, 3766673; 329969, 3766702; 329962, 3766707; 329960, 3766708; 329937, 3766727; 329911, 3766747; 329888, 3766766; 329882, 3766771; 329847, 3766792; 329813, 3766815; 329785, 3766836; 329781, 3766839; 329816, 3766887; 329836, 3766875; 329851, 3766892; 329890, 3766865; 329899, 3766877; 329886, 3766885; 329912, 3766923; 329924, 3766912; 329965, 3766877; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 329965, 3766877.

(ii) **Note:** Map of Unit CA 20 (Map M38) follows:



**Map 38. Zuma Beach (CA-20), Los Angeles County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit

0.5 0 0.5 Miles

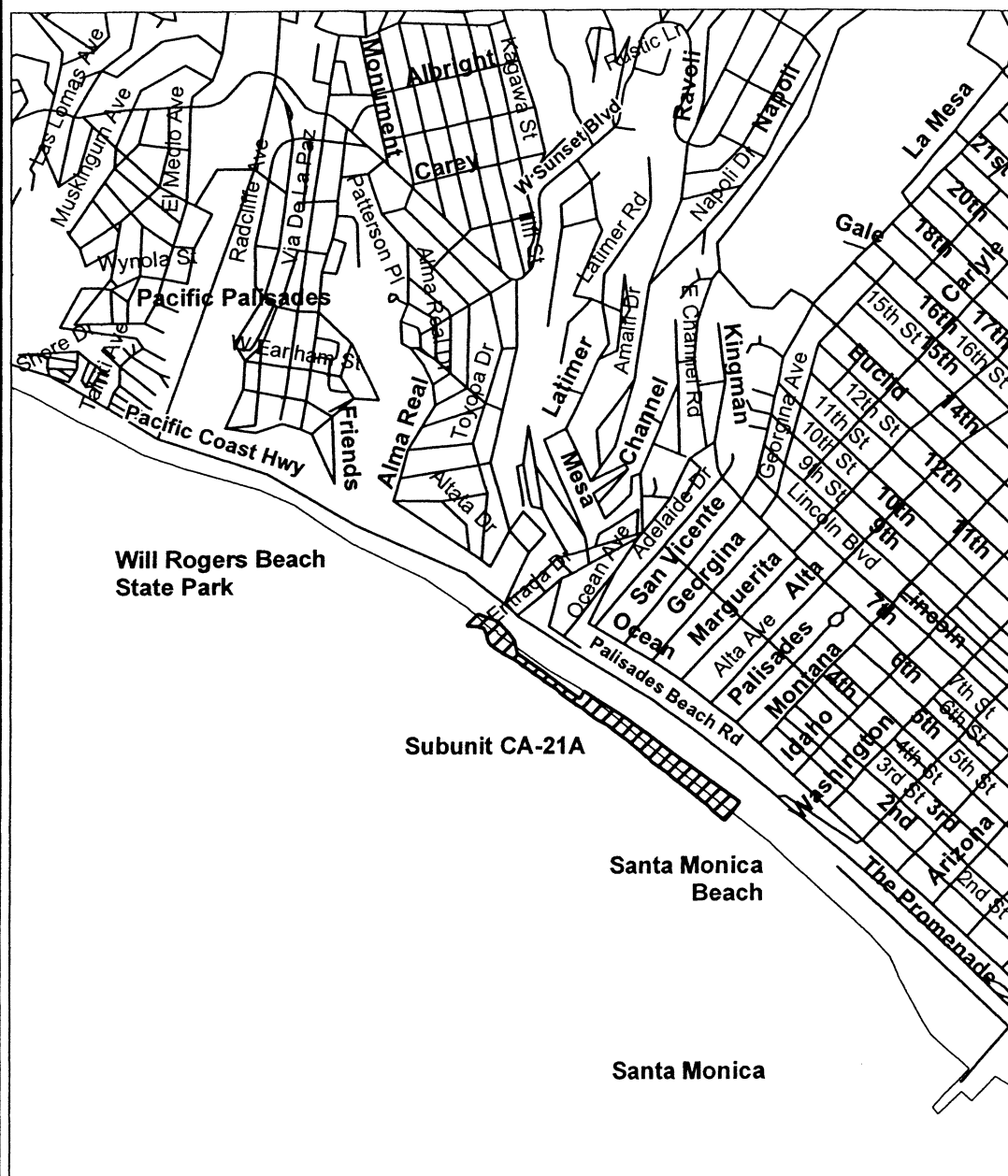
1 0 1 Kilometers



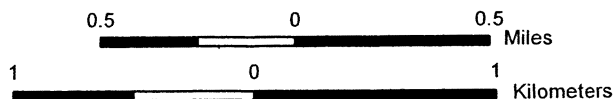


(42) Unit CA 21A, Los Angeles County, California.	359794, 3766072; 359841, 3766016; 359865, 3765980; 359868, 3765955;	proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 359653, 3766064.
(i) From USGS 1:24,000 quadrangle map Topanga, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 359653, 3766064; 359698, 3766104; 359706, 3766112;	359871, 3765928; 359981, 3765838; 360136, 3765710; 360156, 3765737; 360157, 3765740; 360346, 3765605; 360713, 3765301; 360821, 3765208; 360782, 3765167; 360750, 3765131;	(ii) <b>Note:</b> Map of Units CA 21A (Map M39) follows:



**Map 39. Santa Monica Beach (CA-21A), Los Angeles County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit





(43) Unit CA 21B, Los Angeles County, California.

(i) From USGS 1:24,000 quadrangle map Venice, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 366261, 3757311; 366467, 3757409; 366791, 3756716; 366577, 3756633; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 366261, 3757311.

(ii) **Note:** Map of Unit CA 21B (Map M40) follows after description of Unit CA 21C.

(44) Unit CA 21C, Los Angeles County, California.

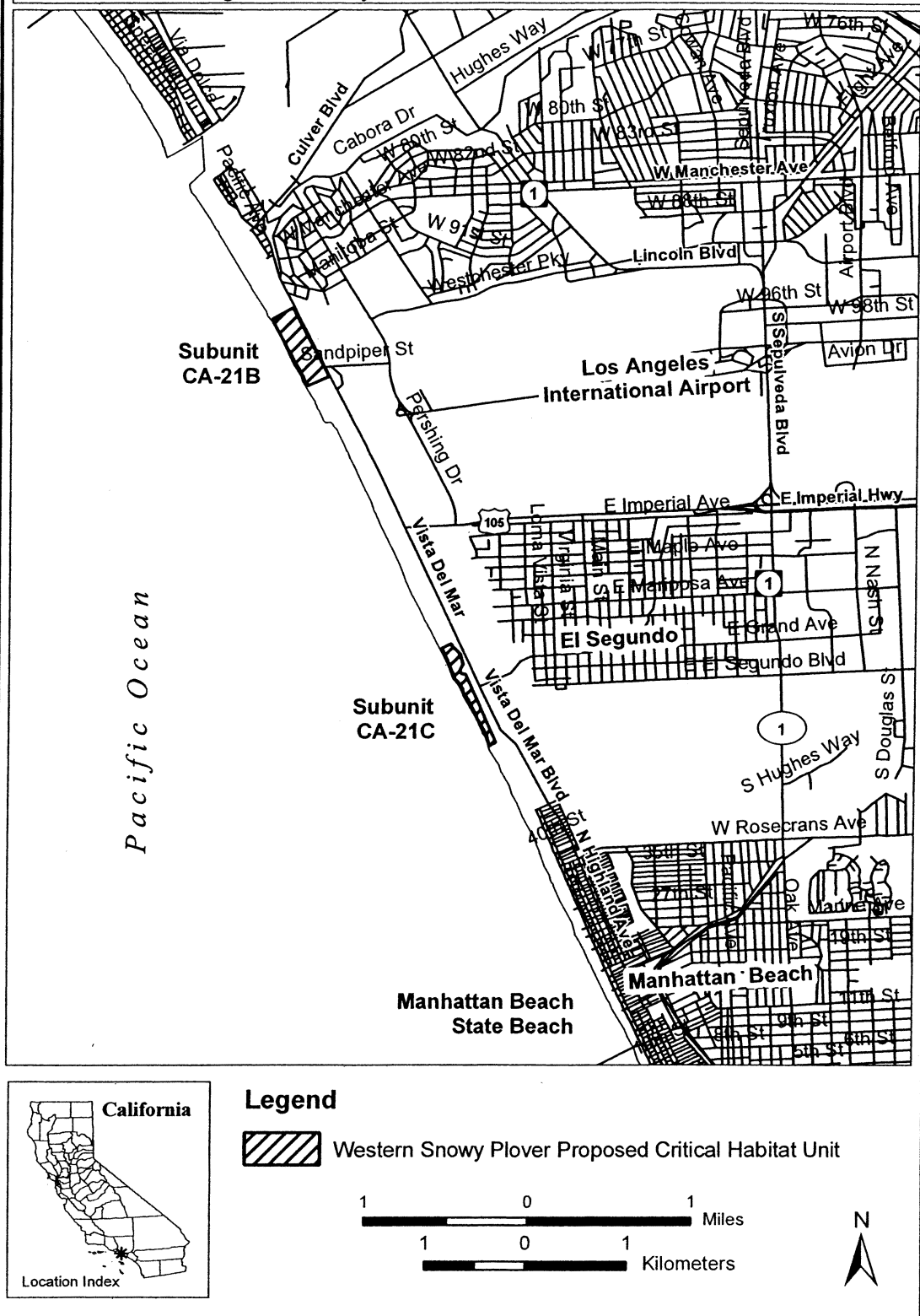
(i) From USGS 1:24,000 quadrangle map Venice, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 367740, 3753997; 367843, 3754038; 367860, 3754002; 367883, 3753980; 367924, 3753925;

367945, 3753827; 367911, 3753766; 367924, 3753739; 367968, 3753730; 368021, 3753592; 368235, 3753042; 368173, 3753011; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 367740, 3753997.

(ii) **Note:** Map of Units CA 21B and CA 21C (Map M40) follows:



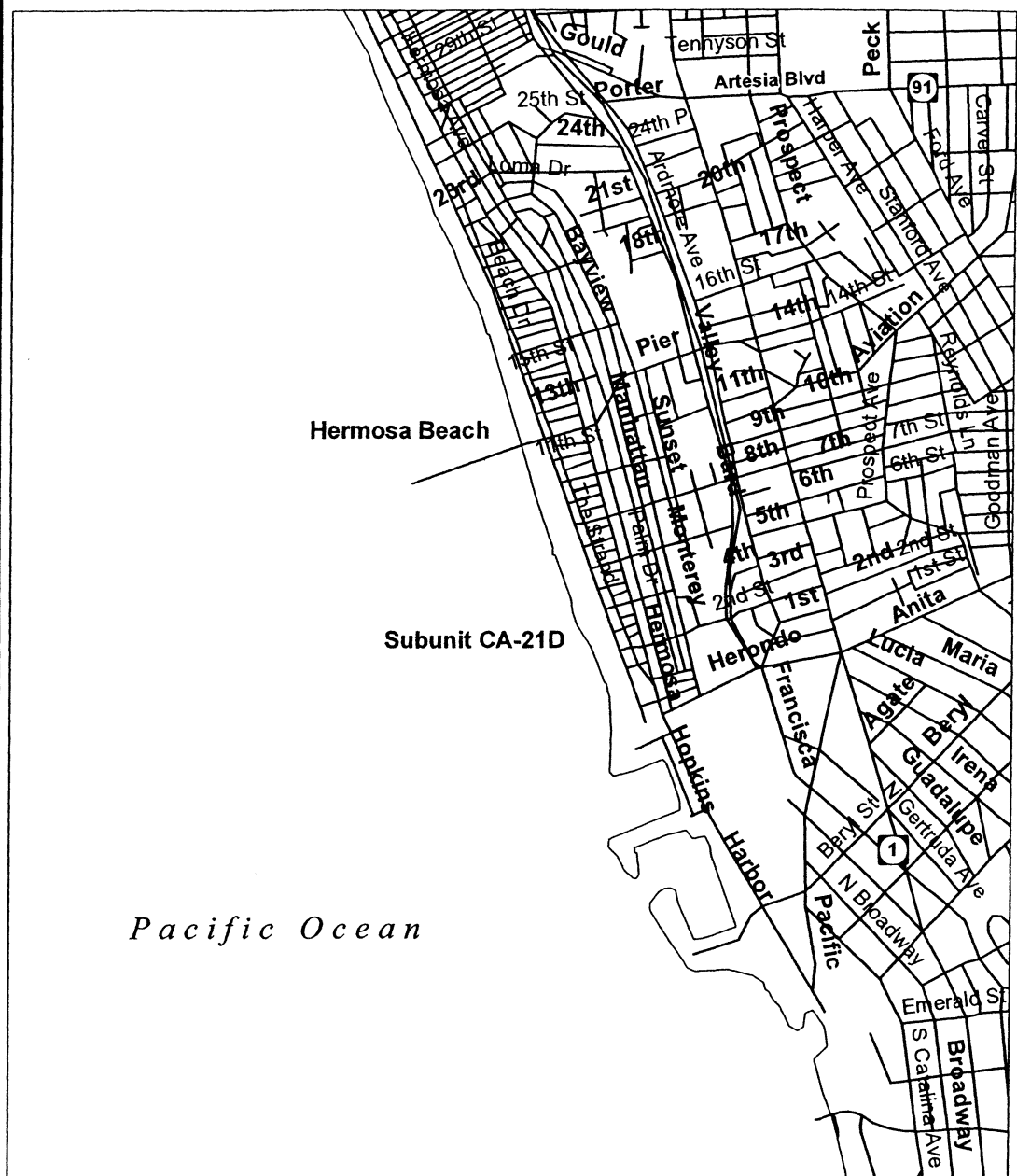
**Map 40.** Dockweiler, North (CA-21B) and Dockweiler, South (CA-21C), Los Angeles County, California.





(45) Unit CA 21D, Los Angeles County, California.	NAD 27 coordinates (E,N): 370468, 3747024; 370560, 3747050; 370594, 3746936; 370696, 3746667; 370602, 3746644; proceed generally N following the mean low water mark (defined at the	beginning of the section) and returning to 370468, 3747024.
(i) From USGS 1:24,000 quadrangle map Redondo Beach OE S, California, land bounded by the following UTM 11		(ii) <b>Note:</b> Map of Unit CA 21D (Map M41) follows:



**Map 41. Hermosa Beach (CA-21D), Los Angeles County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit

0.3 0 0.3 Miles

1 0 1 Kilometers





(46) Unit CA 22A, Orange County, California.

(i) From USGS 1:24,000 quadrangle map Seal Beach, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 403074, 3728680; 403074, 3728681; 403267, 3728834; 403265, 3728996; 403238, 3729044; 403290, 3729077; 403342, 3729164; 403545, 3729348; 403571, 3729356; 403635, 3729419; 404409, 3729117; 404407, 3728750; 404398, 3728717; 404399, 3728532; 404464, 3728525; 404727, 3728380; 404729, 3728299; 405337, 3727975; 405370, 3727979; 405369, 3727845; 405358, 3727807;

405339, 3727778; 405295, 3727725; 405113, 3727543; 405081, 3727505; 405050, 3727457; 405006, 3727428; 404907, 3727378; 404859, 3727355; 404833, 3727349; 404801, 3727356; 404766, 3727373; 404712, 3727387; 404584, 3727405; 404557, 3727413; 404529, 3727431; 404495, 3727462; 404465, 3727486; 404426, 3727492; 404372, 3727479; 404183, 3727422; 403756, 3727974; 403749, 3727975; 403740, 3727969; 403720, 3727949; 403709, 3727950; 403697, 3727958; 403684, 3727961; 403653, 3727943; returning to 403074, 3728680.

(ii) **Note:** Map of Unit CA 22A (Map M42) follows after description of Unit CA 22B.

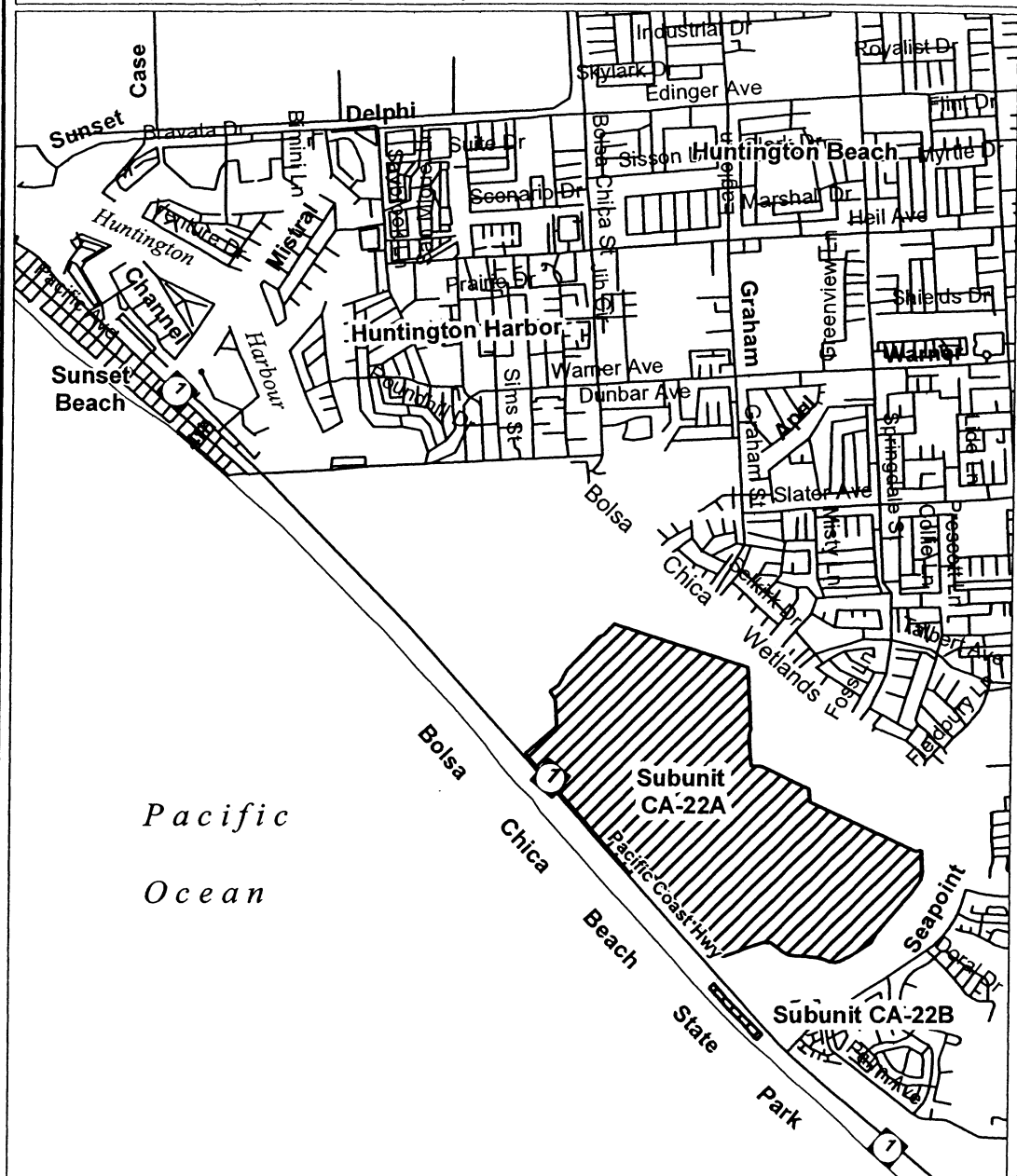
(47) Unit CA 22B, Orange County, California.

(i) From USGS 1:24,000 quadrangle map Seal Beach, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 404089, 3727241; 404122, 3727265; 404183, 3727186; 404256, 3727101; 404389, 3726951; 404360, 3726921; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 404089, 3727241.

(ii) **Note:** Map of Units CA 22A and CA 22B (Map M42) follows:

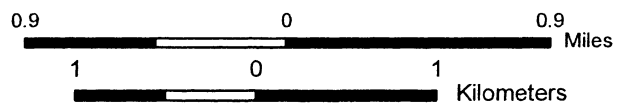


**Map 42.** Bolsa Chica Reserve (CA-22A) and Bolsa Chica St. Beach (CA-22B), Orange County, California.



**Legend**

 Western Snowy Plover Proposed Critical Habitat Unit





(48) Unit CA 23, Orange County, California.

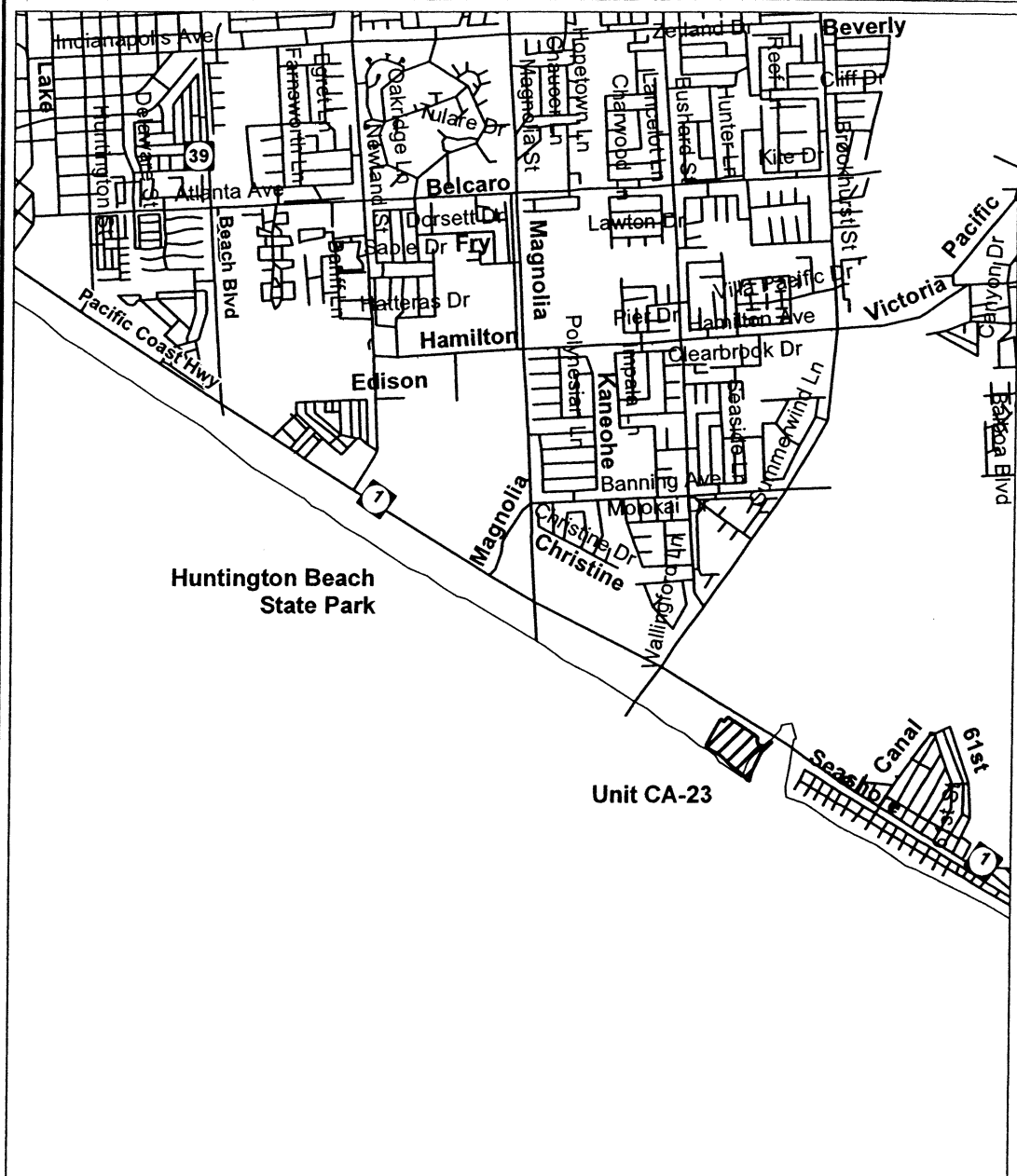
(i) From USGS 1:24,000 quadrangle map Newport Beach, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 411152, 3721501; 411152, 3721498; 411154, 3721486; 411161, 3721477; 411171, 3721472; 411183, 3721471; 411189, 3721473; 411197, 3721476; 411208, 3721485;

411217, 3721493; 411224, 3721488; 411220, 3721483; 411201, 3721465; 411198, 3721462; 411173, 3721438; 411154, 3721408; 411133, 3721368; 411117, 3721336; 411106, 3721293; 411094, 3721298; 411074, 3721321; 411069, 3721327; 411061, 3721335; 411054, 3721344; 411043, 3721354; 411039, 3721358; 411018, 3721375; 411000, 3721392; 410981, 3721413;

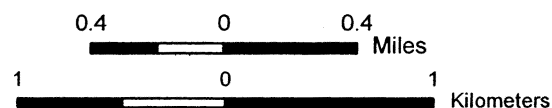
410958, 3721437; 410939, 3721452; 410903, 3721473; 410888, 3721489; 410971, 3721619; 410978, 3721616; 410989, 3721606; 410997, 3721617; 411008, 3721631; 411140, 3721534; 411157, 3721515; returning to 411152, 3721501.

(ii) **Note:** Map of Unit CA 23 (Map M43) follows:



**Map 43. Santa Ana River Mouth (CA-23), Orange County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit





(49) Unit CA 24, Orange County and San Diego County, California.

(i) From USGS 1:24,000 quadrangle map San Clemente, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 444728, 3694059; 444754, 3694175; 444782, 3694151; 444839, 3694108; 444911, 3694062; 445037, 3694001; 445278, 3693889; 445569, 3693753; 445795, 3693646; 445898, 3693601; 445898, 3693576; 445875, 3693547; 445874, 3693547;

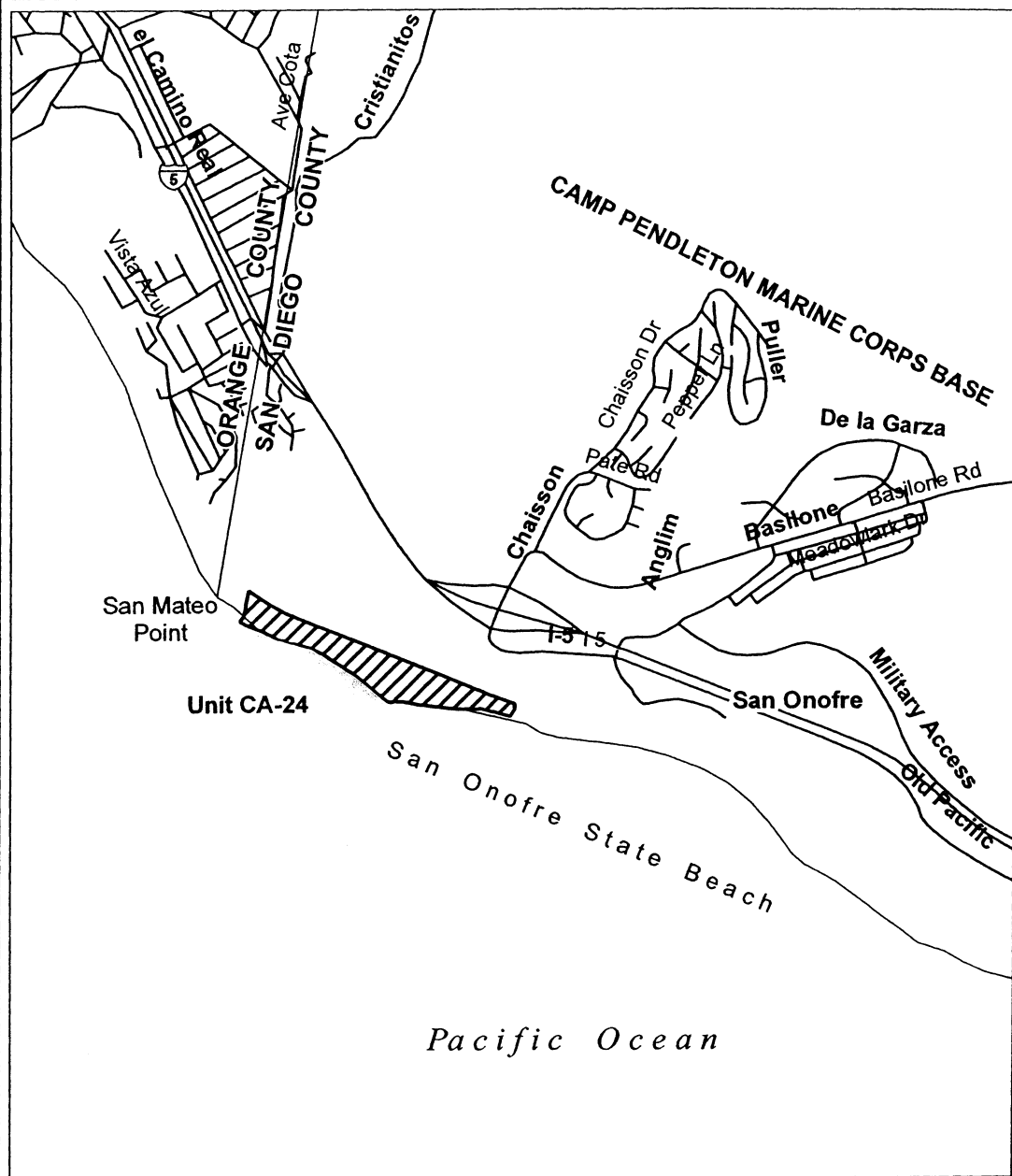
445838, 3693559; 445747, 3693585; 445651, 3693593; 445618, 3693595; 445475, 3693623; 445447, 3693630; 445406, 3693640; 445385, 3693640; 445369, 3693641; 445347, 3693640; 445334, 3693645; 445329, 3693650; 445313, 3693664; 445271, 3693702; 445220, 3693751; 445194, 3693775; 445105, 3693840; 445062, 3693872; 445012, 3693898; 444957, 3693919; 444929, 3693926; 444928, 3693926; 444899, 3693930; 444882, 3693937;

444854, 3693959; 444852, 3693960; 444818, 3693980; 444814, 3693982; 444767, 3694004; 444736, 3694020; 444712, 3694035; 444709, 3694040; 444728, 3694059; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 444728, 3694059.

(ii) **Note:** Map of Unit CA 24 (Map M44) follows:



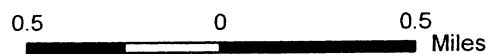
**Map 44.** San Onofre Beach (CA-24), Orange and San Diego County, California.



### Legend



## Western Snowy Plover Proposed Critical Habitat Unit





(50) Unit CA 25A, San Diego County, California.

(i) From USGS 1:24,000 quadrangle map Encinitas, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 470975, 3660809; 470982, 3660811; 471014, 3660802; 471058, 3660765; 471085, 3660733; 471105, 3660704; 471122, 3660645; 471129, 3660592; 471148, 3660540; 471147, 3660511; 471155, 3660493; 471153, 3660485; 471153, 3660485; 471147, 3660482; 471122, 3660510; 471112, 3660507; 471106, 3660501; 471067, 3660464; 471066, 3660464; 471081, 3660447; 471084, 3660437; 471084, 3660417; 471077, 3660393; 471077, 3660378; 471085, 3660361; 471044, 3660341; 471013, 3660349; 471002, 3660338; 470992, 3660306; 470980, 3660296; 470977, 3660316; 470969, 3660338; 470968, 3660341; 470962, 3660360; 470955, 3660391; 470949, 3660420; 470943, 3660453; 470942, 3660456; 470933, 3660489; 470925, 3660522; 470924, 3660525; 470914, 3660562; 470907, 3660588; 470906, 3660597; 470901, 3660624; 470893, 3660651; 470892, 3660654; 470884, 3660676; 470877, 3660694; 470872, 3660706; 470864, 3660726; 470861, 3660740; 470860, 3660742;

470859, 3660754; 470862, 3660764; 470866, 3660765; 470874, 3660770; 470903, 3660785; 470962, 3660804; returning to 470975, 3660809.

(ii) **Note:** Map of Unit CA 25A (Map M45) follows after description of Unit CA 25C.

(51) Unit CA 25B, San Diego County, California.

(i) From USGS 1:24,000 quadrangle map Oceanside, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 472453, 3660939; 472518, 3660920; 472571, 3660894; 472603, 3660856; 472613, 3660817; 472614, 3660776; 472576, 3660736; 472538, 3660692; 472498, 3660666; 472478, 3660670; 472452, 3660693; 472451, 3660695; 472404, 3660732; 472373, 3660751; 472352, 3660760; 472335, 3660762; 472311, 3660758; 472296, 3660748; 472282, 3660746; 472264, 3660752; 472244, 3660769; 472209, 3660804; 472183, 3660843; 472164, 3660882; 472153, 3660903; 472145, 3660929; 472156, 3660952; 472190, 3660981; 472223, 3660990; 472288, 3660980; 472393, 3660956; returning to 472453, 3660939.

(ii) **Note:** Map of Unit CA 25B (Map M45) follows after description of Unit CA 25C.

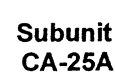
(52) Unit CA 25C, San Diego County, California.

(i) From USGS 1:24,000 quadrangle map Oceanside, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 474053, 3661505; 474074, 3661515; 474082, 3661492; 474109, 3661464; 474118, 3661461; 474119, 3661450; 474144, 3661424; 474169, 3661398; 474189, 3661386; 474201, 3661384; 474210, 3661378; 474228, 3661376; 474237, 3661377; 474247, 3661359; 474263, 3661344; 474302, 3661334; 474357, 3661336; 474385, 3661334; 474386, 3661294; 474393, 3661252; 474413, 3661233; 474450, 3661217; 474494, 3661203; 474539, 3661214; 474584, 3661200; 474628, 3661181; 474654, 3661143; 474615, 3661062; 474594, 3661042; 474562, 3661043; 474543, 3661039; 474530, 3661043; 474504, 3661070; 474472, 3661111; 474452, 3661130; 474380, 3661179; 474321, 3661194; 474236, 3661205; 474200, 3661211; 474166, 3661225; 474140, 3661244; 474113, 3661268; 474081, 3661304; 474075, 3661333; 474076, 3661393; 474075, 3661440; 474048, 3661501; returning to 474053, 3661505.

(ii) **Note:** Map of Units CA 25A, CA 25B, and CA 25C (Map M45) follows:



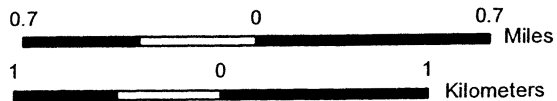
### Map 45.



## Legend



## Western Snowy Plover Proposed Critical Habitat Unit





(53) Unit CA 26, San Diego County, California.

(i) From USGS 1:24,000 quadrangle map Del Mar California, land bounded by the following UTM 11 NAD 27

coordinates (E,N): 475548, 3644417; 475597, 3644428; 475626, 3644433; 475629, 3644418; 475632, 3644391; 475625, 3644370; 475626, 3644353; 475627, 3644350; 475633, 3644335; 475628, 3644322; 475637, 3644298; 475640, 3644293; 475647, 3644279; 475649, 3644271; 475641, 3644267; 475639, 3644267; 475635, 3644257; 475638, 3644237; 475642, 3644195; 475643, 3644190; 475648, 3644165; 475657, 3644139; 475658, 3644120; 475664, 3644091; 475671, 3644073; 475674, 3644054; 475683, 3644029;

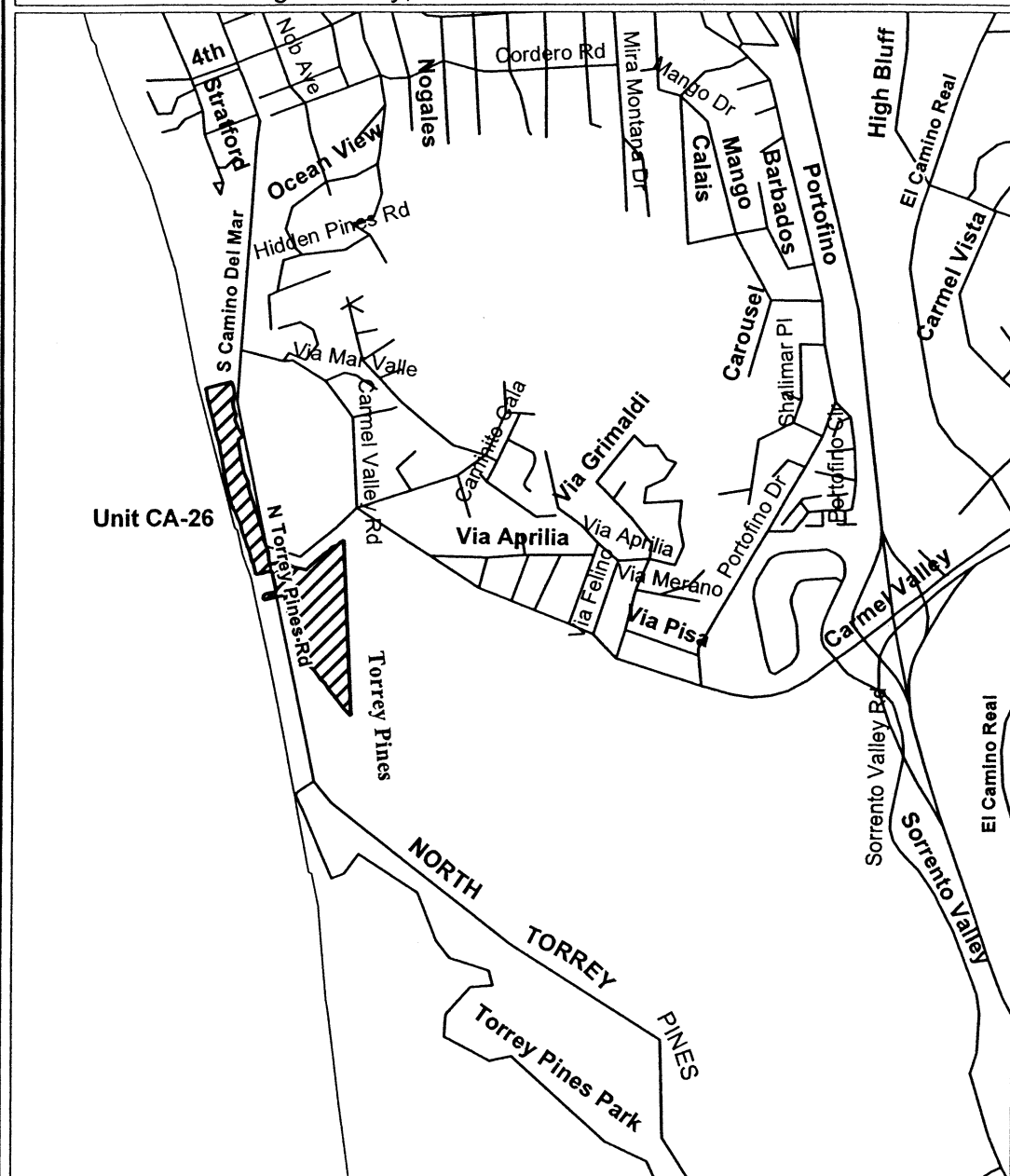
475688, 3644001; 475693, 3643983; 475694, 3643965; 475701, 3643945; 475704, 3643929; 475708, 3643891; 475733, 3643895; 475749, 3643893; 475778, 3643878; 475815, 3643868; 475826, 3643878; 475869, 3643912; 475883, 3643920; 475893, 3643930; 475909, 3643935; 475919, 3643943; 475930, 3643950; 475923, 3643429; 475917, 3643436; 475902, 3643454; 475885, 3643478; 475864, 3643509; 475851, 3643533; 475838, 3643545; 475824, 3643566; 475804, 3643590; 475788, 3643603; 475774, 3643706; 475763, 3643718; 475756, 3643749; 475750, 3643781; 475748, 3643798; 475714, 3643792; 475685, 3643787; 475683, 3643797; 475689, 3643805; 475711, 3643807; 475723, 3643809;

475713, 3643871; 475701, 3643870; 475700, 3643870; 475699, 3643869; 475690, 3643866; 475667, 3643865; 475660, 3643894; 475657, 3643904; 475652, 3643926; 475647, 3643946; 475644, 3643956; 475641, 3643964; 475635, 3643986; 475630, 3644011; 475622, 3644032; 475613, 3644053; 475606, 3644077; 475599, 3644101; 475595, 3644132; 475593, 3644149; 475590, 3644179; 475586, 3644211; 475582, 3644230; 475580, 3644243; 475578, 3644258; 475573, 3644280; 475567, 3644312; 475563, 3644337; 475555, 3644376; 475550, 3644411; returning to 475548, 3644417.

(ii) **Note:** Map of Unit CA 26 (Map M46) follows:



**Map 46.** Los Penasquitos Lagoon/Beach (CA-26),  
San Diego County, California.



**Legend**

 Western Snowy Plover Proposed Critical Habitat Unit

0.3 0 0.3  
Miles

0.5 0 0.5  
Kilometers





(54) Unit CA 27B, San Diego County, California.

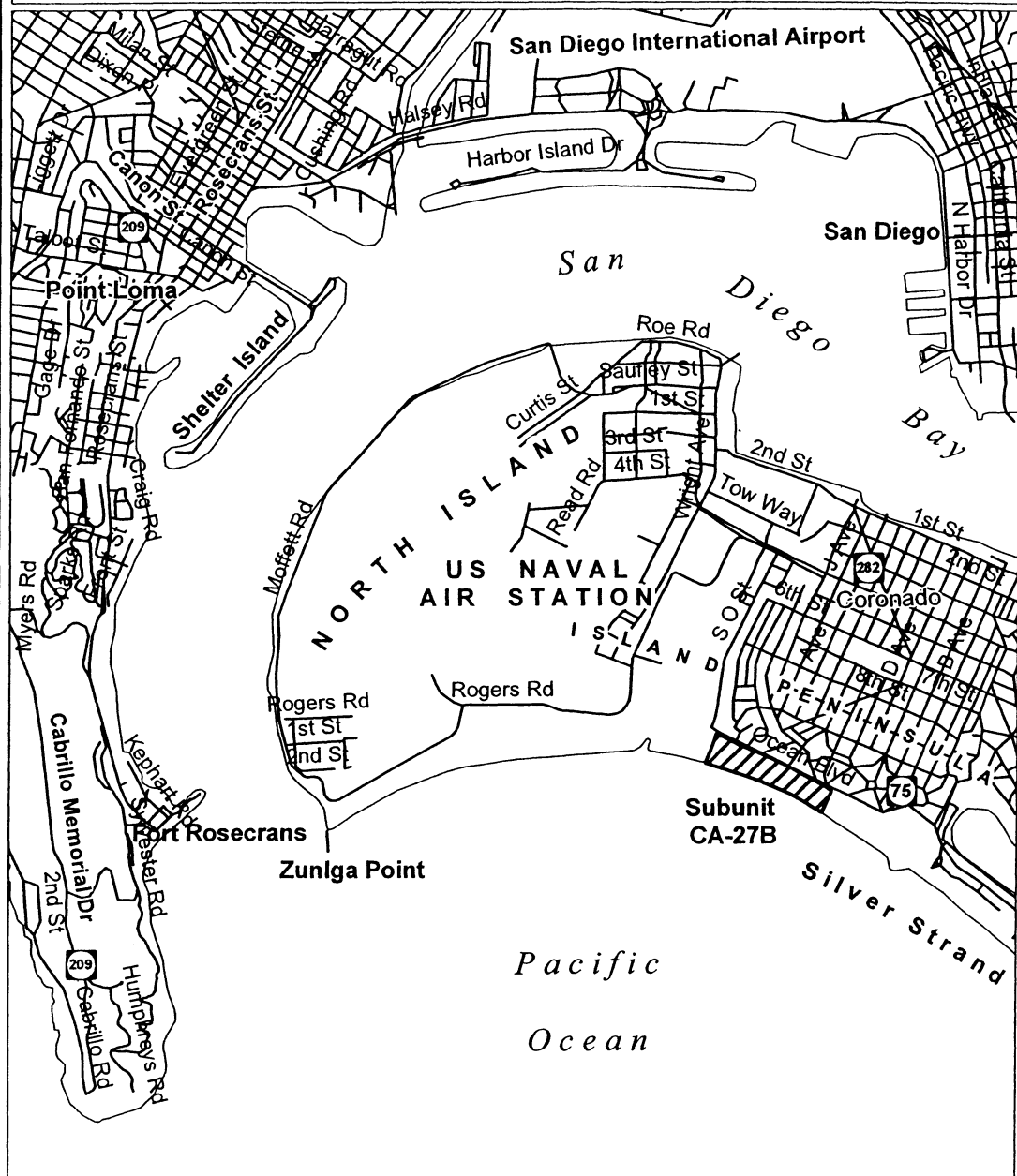
(i) From USGS 1:24,000 quadrangle map Point Loma, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 481501, 3616480; 481510, 3616481; 481524, 3616453; 481540, 3616447; 481565, 3616444; 481580, 3616449; 481601, 3616462;

481613, 3616490; 481630, 3616491; 481669, 3616488; 481690, 3616481; 481734, 3616460; 481794, 3616435; 481826, 3616413; 481836, 3616401; 481893, 3616389; 481928, 3616379; 481996, 3616538; 481998, 3616537; 482008, 3616531; 482011, 3616518; 482024, 3616510; 482038, 3616511; 482160, 3616439; 482347, 3616345;

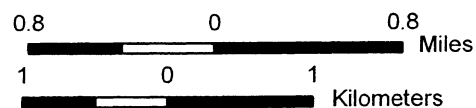
482534, 3616238; 482693, 3616137; 482984, 3615950; 483137, 3615853; 483030, 3615679; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 481501, 3616480.

(ii) **Note:** Map of Unit CA 27B (Map M47) follows:



**Map 47. North Island, South (CA-27B), San Diego County, California.****Legend**

 Western Snowy Plover Proposed Critical Habitat Unit





(55) Unit CA 27E, San Diego County, California.

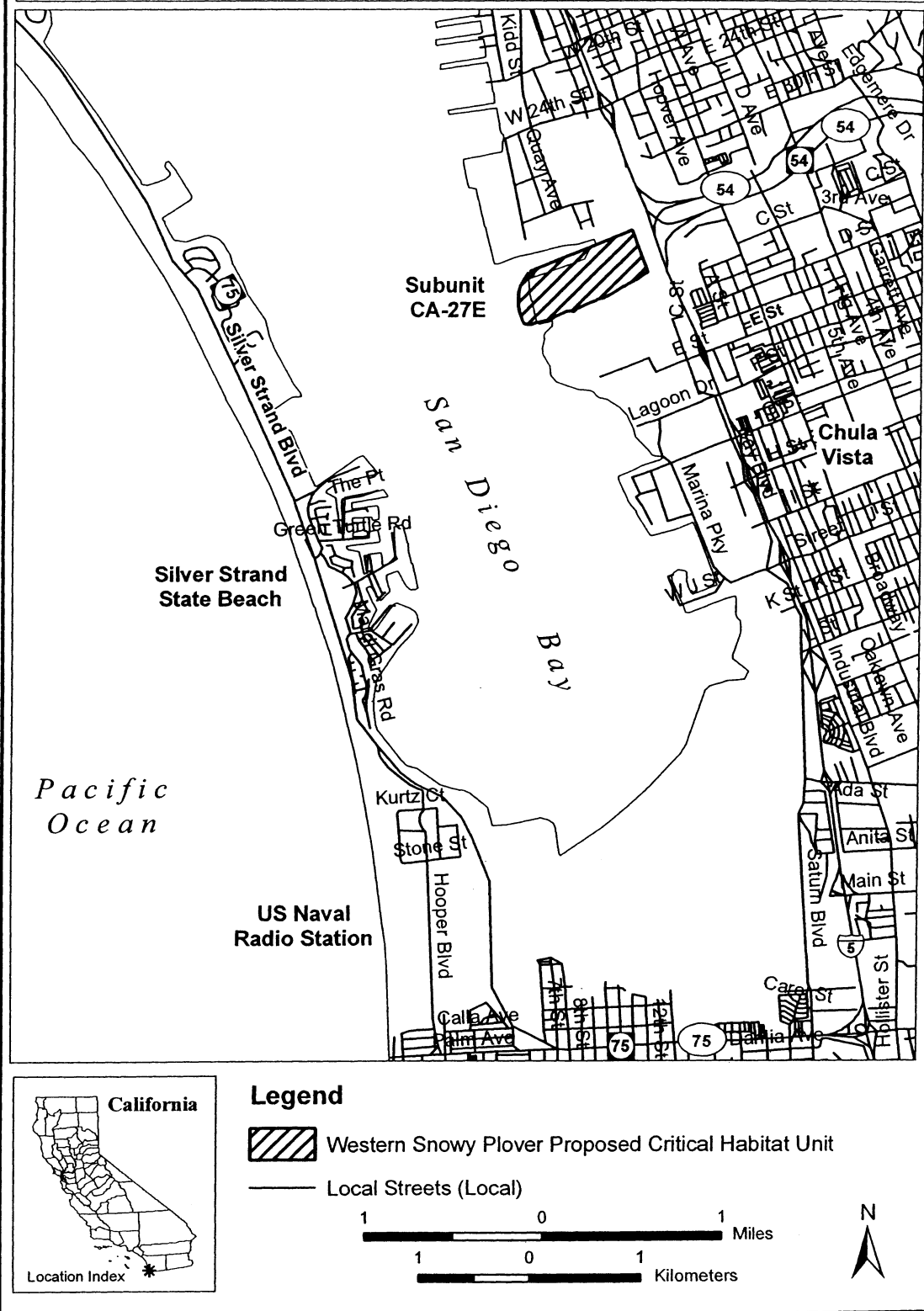
(i) From USGS 1:24,000 quadrangle map National City, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 490217, 3611878; 490174, 3611856; 490047, 3611789; 490028, 3611784; 489947, 3611738; 489878, 3611704; 489865, 3611701; 489834, 3611692; 489806, 3611682; 489792, 3611676; 489727, 3611655; 489611, 3611609; 489580, 3611587; 489555, 3611597; 489521, 3611593;

489412, 3611550; 489384, 3611531; 489366, 3611519; 489331, 3611518; 489282, 3611513; 489259, 3611508; 489253, 3611511; 489253, 3611512; 489237, 3611505; 489229, 3611501; 489208, 3611497; 489161, 3611496; 489138, 3611503; 489122, 3611535; 489097, 3611608; 489093, 3611675; 489094, 3611724; 489101, 3611774; 489123, 3611843; 489166, 3611914; 489200, 3611955; 489201, 3611954; 489200, 3611942; 489199, 3611931; 489204, 3611920; 489210, 3611918;

489219, 3611920; 489228, 3611922; 489240, 3611929; 489246, 3611938; 489245, 3611947; 489237, 3611952; 489225, 3611959; 489219, 3611969; 489220, 3611973; 489501, 3612069; 489791, 3612166; 490070, 3612259; 490144, 3612287; 490269, 3611906; 490231, 3611887; 490217, 3611878; returning to 490217, 3611878.

(ii) **Note:** Map of Unit CA 27E (Map M48) follows:



**Map 48. Sweetwater NWR (CA-27E), San Diego County, California.**



(56) Unit CA 27F, San Diego County, California.

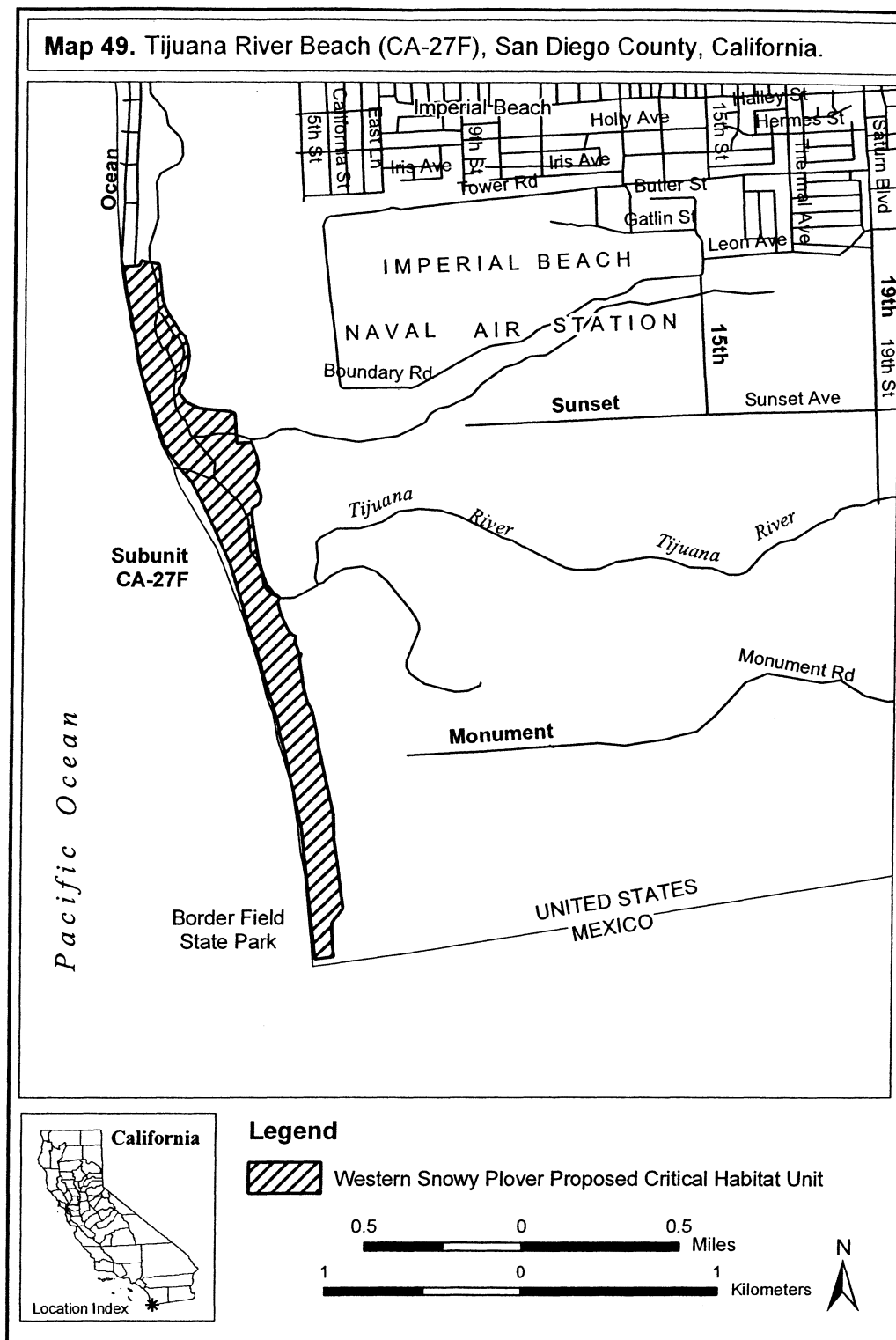
(i) From USGS 1:24,000 quadrangle map Imperial Beach, California, land bounded by the following UTM 11 NAD 27 coordinates (E,N): 487747, 3603052; 487774, 3603045; 487775, 3602998; 487776, 3602973; 487782, 3602890; 487784, 3602855; 487795, 3602817; 487852, 3602714; 487855, 3602708; 487857, 3602705; 487884, 3602674; 487895, 3602625; 487900, 3602575; 487888, 3602515; 487865, 3602451; 487840, 3602415; 487840, 3602398; 487845, 3602382; 487865, 3602354; 487885, 3602334; 487935, 3602307; 487986, 3602298; 488089, 3602283; 488115, 3602272; 488115, 3602119; 488115, 3602119; 488163, 3602119; 488176, 3602119; 488191, 3602119; 488215, 3602040; 488220, 3602021; 488218, 3601977; 488214, 3601966; 488209, 3601953; 488199, 3601928; 488220, 3601871; 488227, 3601841; 488221, 3601817; 488207, 3601802; 488178, 3601790; 488177, 3601766; 488183, 3601680; 488201, 3601524; 488202, 3601514; 488218, 3601458; 488235, 3601397; 488267, 3601352;

488292, 3601337; 488296, 3601328; 488298, 3601324; 488290, 3601310; 488289, 3601309; 488294, 3601262; 488308, 3601227; 488338, 3601155; 488350, 3601139; 488372, 3601126; 488369, 3601108; 488364, 3601102; 488381, 3601046; 488393, 3601035; 488389, 3601016; 488385, 3601005; 488397, 3600864; 488414, 3600789; 488431, 3600753; 488442, 3600707; 488455, 3600623; 488460, 3600571; 488462, 3600541; 488516, 3600211; 488512, 3600098; 488525, 3599982; 488543, 3599731; 488519, 3599700; 488497, 3599679; 488484, 3599658; 488481, 3599607; 488479, 3599545; 488485, 3599487; 488391, 3599479; 488355, 3600146; 488284, 3600563; 488270, 3600623; 488268, 3600633; 488266, 3600640; 488262, 3600676; 488255, 3600707; 488246, 3600747; 488237, 3600787; 488226, 3600824; 488215, 3600867; 488203, 3600907; 488196, 3600938; 488192, 3600960; 488190, 3600970; 488188, 3600980; 488180, 3601013; 488175, 3601040; 488169, 3601068; 488156, 3601101; 488152, 3601121; 488148, 3601136; 488143, 3601148; 488104, 3601308;

488055, 3601513; 487954, 3601774; 487883, 3601935; 487822, 3602015; 487792, 3602053; 487789, 3602061; 487784, 3602072; 487780, 3602080; 487765, 3602103; 487754, 3602128; 487693, 3602349; 487693, 3602358; 487684, 3602390; 487674, 3602420; 487659, 3602478; 487655, 3602497; 487646, 3602564; 487645, 3602576; 487645, 3602586; 487644, 3602592; 487640, 3602616; 487639, 3602636; 487638, 3602646; 487636, 3602655; 487633, 3602674; 487631, 3602703; 487627, 3602732; 487623, 3602760; 487621, 3602791; 487615, 3602816; 487609, 3602849; 487607, 3602885; 487605, 3602894; 487602, 3602915; 487599, 3602941; 487595, 3602976; 487595, 3602998; 487592, 3603024; 487590, 3603045; 487669, 3603044; 487680, 3603054; 487682, 3603073; 487697, 3603064; 487705, 3603062; 487747, 3603052; proceed generally N following the mean low water mark (defined at the beginning of the section) and returning to 487747, 3603052.

(ii) **Note:** Map of Unit CA 27F (Map M49) follows:





\* \* \* \* \*

Dated: September 20, 2005.  
**Craig Manson,**  
*Assistant Secretary for Fish and Wildlife and  
 Parks.*  
 [FR Doc. 05-19096 Filed 9-28-05; 8:45 am]  
**BILLING CODE 4310-55-C**