

REDWOOD NATIONAL AND STATE PARKS STAFF RESPONSIBILITIES AND MANAGEMENT STRATEGY FOR WESTERN SNOWY PLOVERS

(March 2010)

PURPOSE

The staff responsibilities and management strategies described in this document are intended to establish consistency when responding to the presence of western snowy plovers (*Charadrius alexandrinus nivosus*) within the boundaries of Redwood National and State Parks (RNSP or “Parks”). RNSP is composed of Redwood National Park (RNP), Jedediah Smith Redwoods State Park (JSRSP), Del Norte Coast Redwoods State Park (DNCRSP), and Prairie Creek Redwoods State Park (PCRSP). These guidelines will provide direction to park staff and assist park managers in making timely decisions that will ensure the protection of western snowy plovers. Some management actions described in this document may result in the modification of human activities and temporary restrictions on park beaches.

APPLICABLE LAW AND POLICY

It is the policy of the National Park Service (NPS) and California State Parks (CSP or DPR) to protect species listed under endangered species acts (federal and/or state) that are native to the park system. Specifically, it is the policy of the NPS to survey for, protect, and strive to recover all species native to national park system units that are listed under the Endangered Species Act (ESA) (NPS Management Policies 2006). Likewise, it is the policy of CSP to protect species listed under the federal or state endangered species acts that are native to State Park System units (DPR Department Operational Manual Chapter 0300 2004). The Pacific coast population of the western snowy plover is federally listed as a threatened species under the ESA, whose range includes habitats within RNSP. Therefore, in addition to maintaining the natural abundance, distribution, behavior, and ecological role of snowy plovers in RNSP, park managers are obligated to afford the species additional protections provided under the ESA. All reasonable measures will be used to minimize the harassment of western snowy plovers and alteration of their habitat by the presence of humans, while accommodating human use of RNSP beaches to the degree possible.

BACKGROUND

The western snowy plover is one of two subspecies of snowy plover that occur in North America. The Pacific coast population of the western snowy plover consists of those

individuals that nest on the mainland coast, peninsulas, offshore islands, adjacent bays, estuaries, or rivers of the United States Pacific coast and Baja California. The Pacific coast population of the western snowy plover was listed as a threatened species on March 5, 1993 by the U.S. Fish and Wildlife Service (USFWS). In January of 2004, snowy plovers were detected at Gold Bluffs Beach, PCRSP. Prior to then, snowy plovers had only been noted intermittently within RNSP, with sightings reported by a former park ranger at Gold Bluffs Beach in the early 1980's. Skilled volunteer observers surveyed the entire California coast, including portions of RNSP, for wintering snowy plovers from 1979-86 and detected small numbers (fewer than 10) of snowy plovers in the Parks (Page et al. 1986). However, subsequent surveys from 1988-96 failed to detect snowy plovers. Park staff have been conducting regular winter and breeding surveys since 1996, and bi-monthly breeding season surveys of the best potential habitat have been ongoing since 2001. Continued surveys of all potential snowy plover habitat within RNSP are necessary to determine if snowy plovers inhabit park beaches, to monitor wider population trends for the Pacific coast population, and to assess potential effects of RNSP management on individual plovers and their habitat located within the parks.

DEFINITIONS

Brood - The group of snowy plover chicks that have hatched from one nest.

Brood Protection Zone (BPZ) - A portion of beach where certain activities have been temporarily restricted by the Superintendent(s) to protect snowy plover broods. The BPZ extends for up to four miles north and south of the nest site, unless monitoring indicates a different distance is necessary and/or adequate.

Brood Protection Area (BPA) - A temporarily designated portion of beach within the Brood Protection Zone (see above) that allows greater protection for snowy plover broods located within ¼ mile of a high visitor use area.

Fledging - The time when snowy plover chicks are able to fly, chicks are considered fledged at 35 days of age, or when observed in sustained flight for at least 50 feet whichever occurs first.

High Visitor Use Area - For the purpose of this document, seven RNSP beach areas have been designated as high visitor use areas (see Appendix A; maps 1-3).

Plover Protection Area (PPA) - A portion of beach ¼ mile north and ¼ mile south of snowy plovers that has certain activities temporarily restricted by the Superintendent(s) to protect snowy plovers that are located within ¼ mile of a high visitor use area during the nesting season (see below).

Management Action - Any action taken by park staff to protect snowy plovers. This includes, but is not limited to, temporary restrictions and predator control.

Nest Protection Area (NPA) - A portion of beach ¼ mile north and ¼ mile south of a

snowy plover nest that has certain activities temporarily restricted by the Superintendent(s) to provide protection for the snowy plover nest.

Nesting Season - Along the west coast of the United States, the nesting season of the snowy plover extends from March 1st through September 30th.

Symbolic Fencing - A rope, construction fence, or other material, that is used to delineate the boundaries of an area that has temporarily restricted activities within it.

Threatened Species - A species that is designated by the USFWS as likely to become endangered within the foreseeable future (“*endangered*” is a species in danger of extinction throughout all or a significant portion of its range).

Vehicle Beach Access - Vehicular access to RNSP beaches has been allowed for both commercial and disabled sport fishing, and Yurok Native American traditional activities, under either CSP or NPS permits (see Appendix B)

Waveslope - Waveslope is defined as the area that was wetted by the wave action of the previous high tide, and does not include the upper beach berm or any vegetated areas.

Winter Protection Area (WPA) - A portion of beach within ¼ mile north and ¼ mile south of wintering snowy plovers where certain activities may be temporarily restricted by the Superintendent(s) to provide protection for snowy plovers that are located within ¼ mile of a high visitor use area during the winter season.

Winter Season - The winter season for the western snowy plover has been defined as occurring from October 1st through February 28th. During this period plovers are not nesting, and typically are more migratory than during the nesting period. However, they will use the waveslope and upper beach areas for foraging and resting.

SECTION I - STAFF RESPONSIBILITIES

A. DIVISION ROLES

Redwood National and State Parks is a partnership between Redwood National Park and three California State Parks, (Jedediah Smith Redwoods State Park, Del Norte Coast Redwoods State Park, and Prairie Creek Redwoods State Park). Though these parks are cooperatively managed under a MOU, each agency maintains management authority for their lands based on their respective regulations, policies, and guidelines. As such, it is imperative that the appropriate staff, based on management authority, are identified and contacted regarding management issues. All references to responsibilities and actions that follow in this document should be inferred as including the appropriate NPS and CSP staff based on ownership. Please refer to Appendix D for a list of appropriate contact persons.

A.1 Interpretation (INTERP)

Because of the importance of keeping visitors well informed regarding snowy plovers, the Interpretive staff (both RNP & CSP staff) are responsible for ensuring that appropriate literature and visitor information regarding snowy plovers is readily available. Interpretation, with assistance from Resource Management staff, will develop interpretive materials and will be primarily responsible for distributing the materials (e.g. rack cards, brochures, signs, programs, and visitor guides). During the course of normal duties (e.g. roves), Interpretive staff will make direct contact with visitors regarding snowy plovers, assist with monitoring visitor use at areas occupied by plovers to document visitor understanding and compliance of park regulations, and communicate immediately with Visitor Services and Resource Protection about compliance issues. Interpretation will also utilize park volunteer programs to enhance visitor education about snowy plovers, and will report any observations of snowy plovers in a timely manner to the appropriate Resource Management staff (Appendix D).

A.2 Visitor Services and Resource Protection (VSRP)

The Visitor Services and Resource Protection staff will continue to enforce existing regulations regarding beach access and visitor activities, and enforce any new temporary restrictions within identified plover protection zones. The VSRP staff will also contact and inform vehicle beach access permit holders about the presence of snowy plovers on park beaches and any associated temporary restrictions. The VSRP staff will contact the appropriate Resource Management staff (Appendix D) as soon as possible regarding compliance issues on park beaches, noting the date, time, location, and type of activity. At the end of each calendar year, the VSRP will provide to the NPS and CSP Resource Management Leads (Appendix D) a summary of all law enforcement patrols conducted when plovers are nesting or have broods. The summary will include the date and time of patrols, area patrolled, and any compliance issues noted, contacts, or citations issued. The VSRP staff will supply copies of each vehicle permittee's quarterly beach access log to the Resource Management Leads on a quarterly basis. The VSRP will also assist with posting regulatory signs.

A.3 Resource Management (RM)

Resource Management (RM) staff will continue snowy plover monthly winter and twice-monthly breeding season surveys, and perform additional monitoring as needed. The RM group will keep park staff informed of monitoring results and the need for any temporary restrictions. Authorized personnel or contractors of the RM group will erect snowy plover predator exclosures and symbolic fencing at nest sites when necessary. Resource Management staff will provide snowy plover related biological information to Interpretive staff for development of interpretive materials and programs. Resource Management staff are responsible for providing educational opportunities for park employees (including contractors and volunteers) that will be working on the park beaches about snowy plover identification, ecology and associated management issues. All park staff will communicate with the Resource Management Leads concerning

projects that will occur on park beaches at the initiation of planning and/or when preparing funding requests for projects. Resource Management staff will continue to conduct consultations with USFWS regarding any park-initiated activity that has the potential to impact snowy plovers or their habitat.

A.4 Maintenance (MAINT)

As recommended and assisted by the RM group, Maintenance staff will install symbolic fencing and informational and regulatory signs as needed. The proper and timely collection and disposal of refuse is critical to preventing congregations of potential plover predators such as common ravens and American crows at visitor use facilities near the beach. Therefore, Maintenance staff will continue trash collection and removal in a timely and consistent manner. The sign shop will produce snowy plover informational and regulatory signs that are consistent with current rangewide snowy plover recovery efforts. The NPS and CSP Maintenance supervisors will communicate with Resource Management Leads about projects that will occur on the park beaches at the initiation of planning and/or when preparing funding requests for projects.

A.5 Administration (ADMIN)

The Administration staff will ensure that all new employees are provided with snowy plover literature/brochures during their orientation. The Administration group will also ensure that contracts for work performed on the beach include requirements (approved by the Resource Management Leads) for working in snowy plover habitat and list the possible temporary work restrictions that might be imposed to protect snowy plovers and their habitat.

B. EDUCATION

B.1 Employee Education

Improving employee knowledge of snowy plovers and their ecology will help to protect the species. Therefore, all park employees, volunteers, and contractors that work on RNSP beaches must receive educational information about snowy plovers. The RM group, will ensure that employees are provided notification of educational opportunities and also maintain a record of those in attendance to assure compliance. CSP staff are required to attend a snowy plover workshop at least every five years.

B.2 Vehicle Beach Access Permit Holders

Improving vehicle beach access permit holders' knowledge of western snowy plovers and their ecology will help to protect the species. Therefore, all vehicle beach access permit holders will be required to provide certification that they have attended a western snowy plover training session that includes the following:

- a. Biology, ecology and behavior of the western snowy plover

- b. Identification of plovers and other common beach shorebirds
- c. Threats to the plovers and their habitats
- d. The current and range wide status of the western snowy plover
- e. Regulatory status of the snowy plover including salvage of carcasses
- f. Reporting sightings of the western snowy plover
- g. Night time driving and identification of the western snowy plover

Licensees are responsible for obtaining their own training that must be given by a qualified person with a current 10(a) (1) (A) permit issued by the USFWS. All vehicle beach access permit holders will annually receive literature about western snowy plover ecology, current management policies, and potential temporary restrictions when they renew their permits.

B.3 Responder Qualifications

Persons conducting surveys, locating and monitoring nests, erecting exclosures, handling eggs and/or capturing and banding plovers will be on a valid 10(a) (1) (A) permit as authorized individuals to conduct said activities. All persons that participate in snowy plover breeding season surveys will have Level 2 training, and only authorized persons with Level 3 training will erect predator exclosures (see appendix C). Individuals with Level 4 training will handle eggs and only those individuals with Level 5 training will capture and/or band plovers in association with scientific investigations or injured individuals.

C. REPORTING OBSERVATIONS

All RNSP employees, volunteers, contractors, and beach access permit holders will be responsible for immediately reporting observations (or suspected observations) of snowy plovers to a member of the RM group (Appendix D). At a minimum, individuals should record the date, time, location (as specific as possible), and number of birds. Individuals that observe a snowy plover should also attempt to record any leg band colors if present (see Section II, C.2). While most visitor observations will be reported at visitor centers, all employees have the responsibility to record an observation if reported to them by a visitor, and to forward that information immediately to the appropriate RM staff. Visitor name(s), address and phone number should be recorded so that follow up contact can be made. Other useful information to obtain from visitors observations include: the location relative to a known landscape feature, description of the plover (especially if a leg band is present, see Section II, C.2), and general description of the circumstances surrounding the sighting.

D. DECISION MAKING PROCESS

The NPS and CSP Resource Management staff have the responsibility to evaluate all reports of snowy plover observations within RNSP and forward the information to the designated RM Lead(s) (Appendix D). The NPS and CSP RM Leads will recommend the appropriate management actions (see tables 1&2, Section II) to the NPS Resource

SECTION II - MANAGEMENT STRATEGY

A. WINTERING PLOVERS

During the winter period (Oct. 1 – Feb. 28), Gold Bluffs Beach and Freshwater Spit are surveyed monthly $\pm$ 4 days of the 15th. Crescent Beach and the beach north of Redwood Creek (Mussel Beach) are typically not surveyed during this time as they are inaccessible due to high surf. When snowy plovers are detected on park beaches, the following management actions will be implemented, depending on the date, location, and number of plovers. The Group(s) responsible for implementing the management actions mentioned follow and are italicized. Table 1 (below) summarizes the management actions for wintering snowy plovers.

Table 1. RNSP protective measures for wintering snowy plovers.

WINTER	October 1– January 31	February 1– 28
2 or more plovers in low use area	- Continue monthly monitoring	- Increase monitoring to 2 surveys/month - Post educational signs at access points
2 or more plovers in high use area	- Increase monitoring to 2 surveys/month - Post educational signs at access points - Restrict activities (see A 3 below)	- Increase monitoring to 2 surveys/month - Post regulatory signs at access points - Restrict activities (see A.3 below)

A.1 Monitoring - RM

Currently, Gold Bluffs Beach and Freshwater Spit are surveyed once per month from October through February, and surveys are done on the other park beaches once in January (rangewide winter window survey). Monitoring will be increased from current levels up to 2 surveys per month, depending on the number of plovers, their location, and the date of observations (see Table 1).

A.2 Education - INTERP, RM, MAINT, VSRP

Educational materials about snowy plovers (e.g. rack cards, brochures, signs, programs, and visitor guides) that are consistent with current rangewide snowy plover recovery efforts will continue to be made available at all visitor centers and kiosks. Educational and regulatory signs will be posted at beach access points and existing park bulletin boards along park beaches if applicable scenarios in Table 1. occur. Park employees, contractors, and volunteers that work on beaches, and vehicle beach access permit holders, will also receive training to help them identify wintering snowy plovers and protect snowy plovers and their habitat.

A.3 Restrict Activities - VSRP, RM, MAINT

From January 1st – February 28th vehicle speed limits will be restricted to 10 mph when adult plovers are present. If 2 or more plovers are detected within ¼ mile of a high visitor use area on 2 consecutive surveys in February, managers will designate a temporary winter protection area (WPA). Regulatory signs and symbolic fencing will be used to designate the WPA, which could extend up to ¼ mile north and south of the plovers, excluding the waveslope, and include the sandy beach area up to 1,000 feet inland from the waveslope. No human access would be allowed within the WPA, but the waveslope adjacent to the WPA would still be accessible to pedestrians, equestrians, and vehicle traffic restricted to 10 mph. Pedestrian travel above the waveslope within the WPA would be allowed along marked corridors if the WPA significantly overlaps a high visitor use area.

A.4 Enforcement - VSRP

Law Enforcement (LE) Rangers will communicate with vehicle beach access permit holders and visitors about the presence, status, and approximate location of snowy plovers on park beaches. Information about temporary restrictions due to the presence of snowy plovers will also be mailed to existing beach access permit holders. LE Rangers will continue to enforce existing and any new temporary restrictions due to the presence of snowy plovers (see Section II, A.3).

B. BREEDING SEASON PLOVERS

During the breeding period (March 1 – Sept. 30), Gold Bluffs Beach and Freshwater Spit are surveyed twice per month ($\pm$ 4 days of the 15th and the 1st). Crescent Beach and the beach north of Redwood Creek (Mussel Beach) are surveyed monthly. When snowy plovers are detected during the breeding season on RNSP beaches, the following management actions will be implemented depending on the location and number of plovers, the time period they are present, and primarily by whether they are attempting to nest or have nested, and by the presence of broods. Table 2 (below) summarizes the management actions for breeding season snowy plovers.

Table 2. RNSP protective measures for snowy plovers during the breeding season.

NESTING	Plovers Present (Mar 1-Aug.31; any number)	Nesting confirmed	Broods Present
Monitoring	- Increase monitoring to weekly (to track breeding plovers and find scrapes/nests)	- Increase monitoring to > once per week if necessary (to monitor nest fate) - Band adults (if needed) & juveniles	- Increase monitoring to > once per week if necessary (to monitor brood movements)
Education	- Post education and regulation signs at access points	- Post education and regulation signs at access points - Snowy Plover volunteer “corps” for education	- Post education and regulation signs at access points - Snowy Plover volunteer “corps” for education
Zones and Restrictions	- Restrict activities (see B.3 below) - Post regulatory signs at protection zone	- Restrict activities (see B.4 below) - Post regulatory signs at protection zone - Symbolic fencing - Predator exclosures/control	- Restrict activities (see B.5 below) - Post regulatory signs at protection zone - Symbolic fencing

B.1 Increase monitoring - RM

Monitoring will be increased from current levels (1-2 surveys per month from March through September) up to more than once per week if necessary and depending on staff availability. The primary goal of increased monitoring during the breeding season will be to look for breeding plovers, scrapes, nests, eggs, and broods in a timely manner so that plover nest and brood protection measures (see below) can be most effective.

B.2 Implement Education – INTERP, RM

In addition to the measures mentioned in Section II, A.2, RM and INTERP will form a volunteer “snowy plover corps” of trained docents to educate visitors and other beach users about snowy plover presence, identification (including reading colored leg bands see Section II, C.2), biology, and any temporary restrictions due to the presence of snowy plovers. Also, INTERP will present weekly campfire talks at RNSP Campgrounds that will specifically address snowy plover ecology, management issues, and temporary restrictions.

B.3 Plover Protection – VSRP, RM

If 2 or more plovers are detected within ¼ mile of a high visitor use area, managers will designate a temporary plover protection area (PPA). Regulatory signs and symbolic fencing will be used to designate the PPA, which could extend up to ¼ mile north and south of the plovers, excluding the waveslope, and include the sandy beach area up to 1,000 feet inland from the waveslope. No human access would be allowed within the PPA, other than 10(a)1(A) permitted western snowy plover (WSP) surveyors, but the waveslope adjacent to the PPA would still be accessible to pedestrians, equestrians, and

vehicle traffic. Pedestrian travel above the waveslope within the PPA would be allowed along marked corridors if the PPA significantly overlaps a high visitor use area.

B.4 Nest Protection - VSRP, RM

Regulatory signs and symbolic fencing will be used to designate a temporary nest protection area (NPA) that could extend up to ¼ mile north and south of the nest, based on the nest's proximity to and the potential for human disturbance. The NPA excludes the waveslope and includes the sandy beach area up to 1,000 feet inland from the waveslope. No human access would be allowed within the NPA, other than 10(a)1(A) permitted WSP surveyors, but the waveslope adjacent to the NPA would still be accessible to pedestrians, equestrians, and vehicle traffic. Pedestrian travel above the waveslope within the NPA would be allowed along marked corridors if the NPA significantly overlaps a high visitor use area. Vehicles passing through the NPA along the waveslope will be required to travel no more than 5 mph. Authorized personnel with Level 3 training (see Appendix C) will erect predator exclosures around snowy plover nests if necessary. Predator control around snowy plover nests may be implemented if appropriate and authorized (see Section II, C.3)

B.5 Brood protection – VSRP, RM

The entire beach segment will be closed to night-time driving when plover chicks are present. Restrictions on night-time driving will begin on or before the date that hatching begins and will continue until the chicks have fledged. Chicks are considered fledged at 35 days of age, or when observed in sustained flight for at least 50 feet whichever occurs first. When snowy plover nests are found before the last egg is laid, restrictions will begin on the 26th day after the last egg is laid. This assumes an average incubation period of 27 days and provides a one day margin of error. When nests are found after the last egg has been laid, restrictions will begin on a date selected by estimating hatch date from egg floatation. If hatching occurs earlier than expected, or chicks are discovered from an undetected nest, night-time driving restrictions will begin immediately. When chicks are present there will be increased monitoring to document movements of the brood along the beach. Signs will be used to designate a temporary brood protection zone (BPZ) until the chicks fledge. The BPZ could extend up to four miles north and south of the nest site (USFWS 2007). The BPZ includes the wave slope and the sandy beach area up to 1,000 ft (305 m) inland from the waveslope. Regulatory signs and symbolic fencing will be used to designate the north and south boundaries of the BPZ. Human access will be permitted within the BPZ, but the BPZ will be closed to dogs, horses, and kite flying. The waveslope adjacent to the BPZ will still be accessible and open to pedestrian travel and vehicle traffic not to exceed 5 mph. Restrictions on vehicle speed limits will begin as soon as nest(s) are discovered and will continue until the chicks have fledged. If broods are detected within ¼ mile of a high visitor use area, managers will designate a temporary brood protection area (BPA), depending on the brood's proximity to, and the potential for, human disturbance. Regulatory signs and symbolic fencing will be used to designate the BPA, which could extend up to ¼ mile north and south of the brood, excluding the waveslope, and include the sandy beach area up to 1,000 feet inland from the waveslope.

No human access would be allowed within the BPA, other than 10(a)1(A) permitted WSP surveyors, but the waveslope adjacent to the BPA would still be accessible to pedestrians and vehicles limited to 5 mph. Pedestrian travel above the waveslope within the BPA would be allowed along marked corridors if the BPA significantly overlaps a high visitor use area.

B.6. Enforcement - VSRP

Law Enforcement (LE) Rangers will communicate with all beach vehicle access permit holders and visitors about the presence and approximate location of snowy plovers, nests, and broods on park beaches. LE Rangers will continue to enforce existing regulations and enforce any new regulations and temporary restrictions within the nest and brood protection areas (see Section II, B.4, and B.5).

C. MANAGEMENT GUIDELINES RELATIVE TO:

C.1. Standard Signs and Text

The parks will utilize two different informational/regulatory signs. One will be posted at beach vehicle access points and convey general plover information and address regulatory issues related to operating vehicles on the beach. The other will be posted at park bulletin boards and visitor beach access points near the beach and will convey general plover information and address regulatory issues related to human and pet activity on the beach. The parks will also utilize current Recovery Unit 2 snowy plover regulatory signs that, placed directly on the beach and/or symbolic fencing, that will designate restricted area boundaries (e.g. nest protection area). The beach regulatory signs will be mounted so that they do not provide potential perch sites for predators. All snowy plover regulatory signs specific to RNSP will be developed and finalized by the Interpretation, VSRP, and RM staff.

C.2. Reading Colored Leg Bands

Standard U.S. Fish and Wildlife Service leg bands for snowy plovers are aluminum, but they are often wrapped with colored tape. Plastic color bands are also used to mark plovers. Color band combinations should be “read” from top to bottom and from the plover’s left leg to its right. For example, seeing a plover with a red band over a green band on its left leg, and a red band over a yellow band on its right leg would result in the notation R/G: R/Y. Colors frequently employed along the Pacific coast include:

V- violet (mauve)	L- lime	R- red
A- aqua (light blue)	Y- yellow	N- brown
B- blue	O- orange	K- black
G- green	P- pink	W- white

Some color bands are wrapped with a narrow stripe of a second color in the middle portion of the band. These should be noted, for example, LKL (lime band with black

stripe). Metal bands should be coded M. Color band reports should be submitted to the RM Leads (Appendix D) immediately.

C.3. Predator Control

Habitat management should be implemented to remove nesting and foraging sites for common ravens (*Corvus corax*). Improvements in beach habitat, such as the removal of European beachgrass (*Ammophila arenaria*) would increase snowy plover nesting opportunities and may make it more difficult or time consuming for ravens to find nests. Raven populations may also be managed through manipulation of human related food supply. Identifying and removing communal roost sites or reducing food resources near snowy plover nesting beaches may be useful in reducing raven populations in these areas. The methods for raven control mentioned above have worked in other areas, but may not be applicable in all areas or situations. If these methods are not effective then other types of actions may be considered. Refer to the RNSP Corvid Management Strategy (RNSP 2008) for more specific information and management suggestions.

LITERATURE CITED

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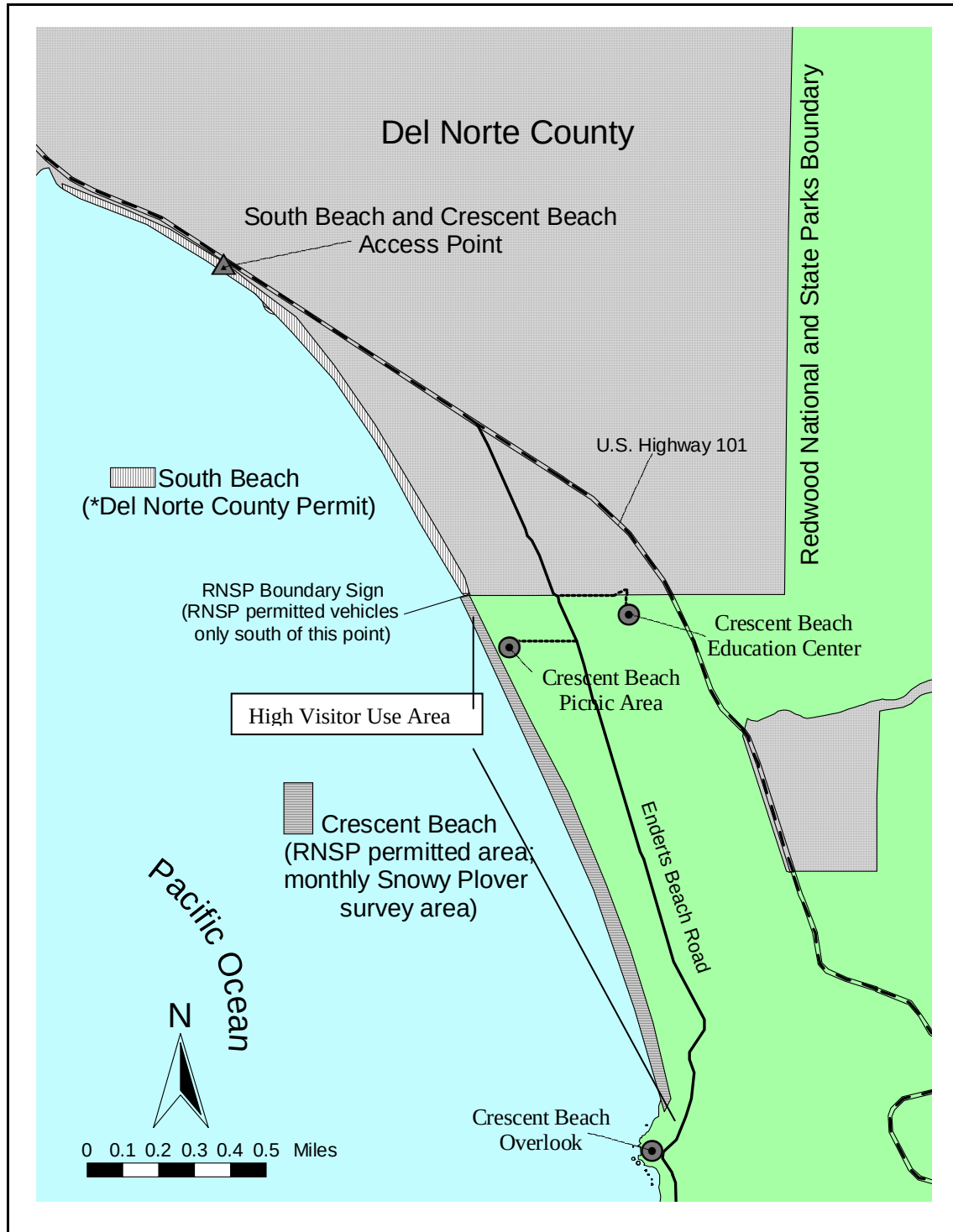
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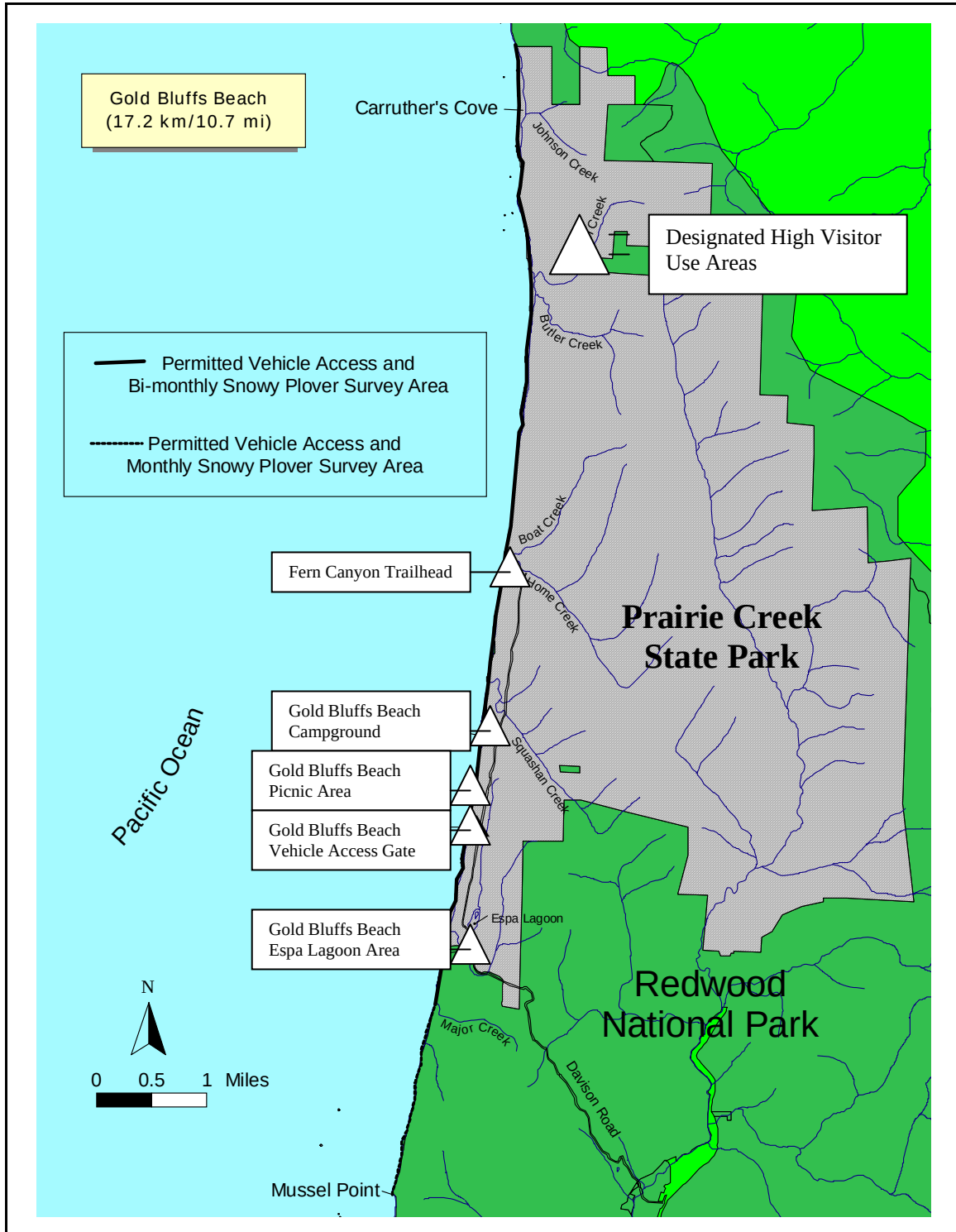
Appendix A. Designated high visitor use areas (survey frequency refers to nesting season).

Map 1 - Crescent Beach, Redwood National Park.



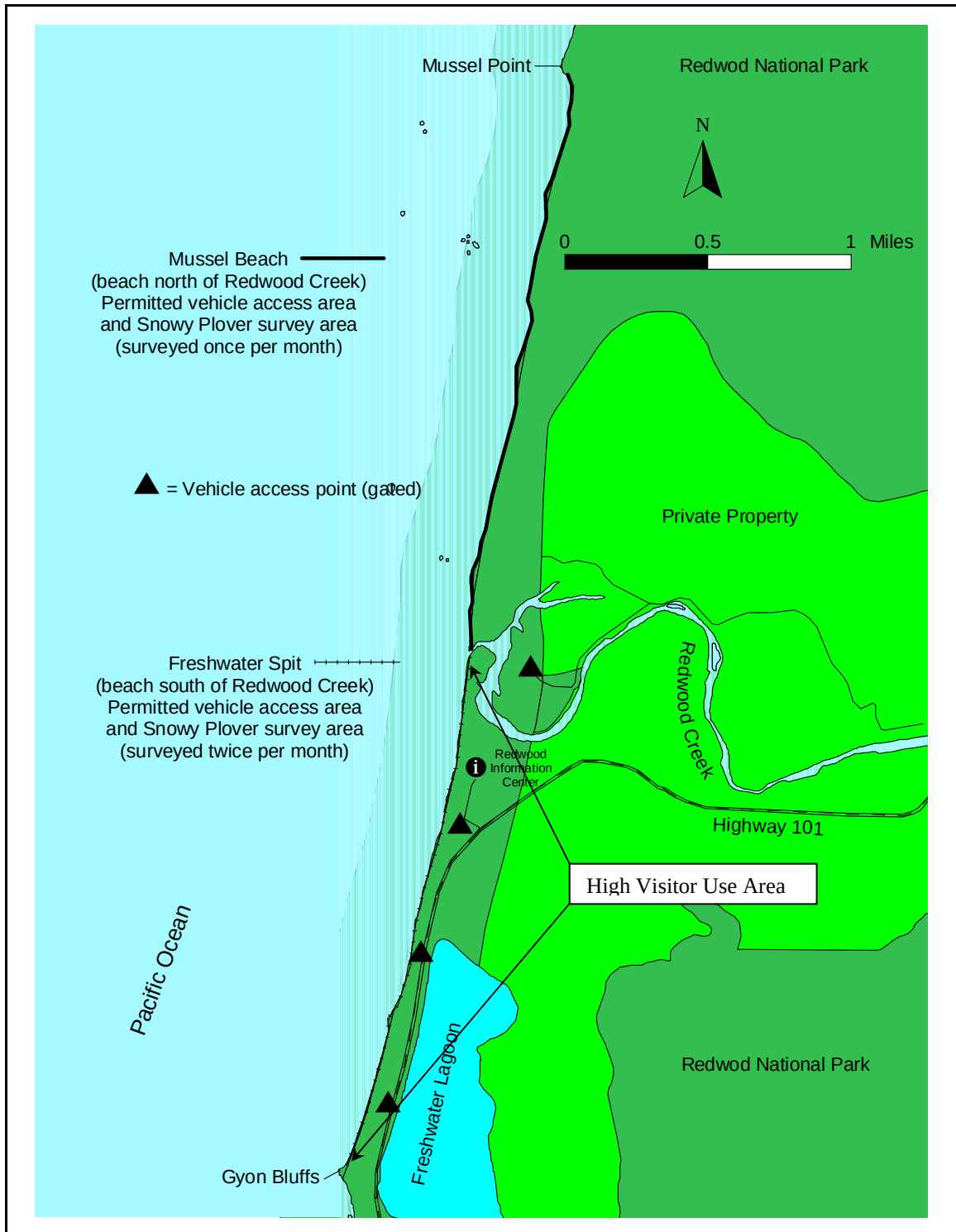
Appendix A. (cont.)

Map 2 - Gold Bluffs Beach, Prairie Creek Redwoods State Park and Redwood National Park.



Appendix A. (cont.)

Map 3 - Freshwater Spit and Mussel Beach, Redwood National Park.



Appendix B. Annual vehicle beach access permit information and beach descriptions where vehicles are allowed.

There are four sections of beach within RNSP to which the NPS and/or CSP allow limited access by street-legal, 4-wheel drive vehicles through an annual permit system. In total, five different types of vehicle beach access permits are issued by RNSP staff for three purposes: commercial fishing, sport fishing for the mobility impaired, and traditional Yurok Native American activities. The beaches where vehicles are allowed, the annual permits applicable to each of them, and the activities associated with permitted actions are described in detail below.

Beach Descriptions

North and south of Redwood Creek (NPS) are the areas of sandy beach beginning at the north end of Gyon Bluffs, continuing north along Freshwater spit, across the mouth of Redwood Creek, and ending at the southern base of Mussel Point (see Appendix A, Map 3). This stretch of beach covers approximately 3.8 miles (6.1 km) total, with 1.8 miles (2.9 km) of beach south of the Redwood Creek mouth (Freshwater Beach), and two miles (3.2 km) of beach north of the Redwood Creek mouth (Mussel Beach). There are three gated and locked access points for permitted vehicles along Freshwater Beach and one at Mussel Beach. The gated access points at Freshwater Beach are located near the south and mid sections of Freshwater Spit, and near the entrance to the Redwood Information Center. The access point for Mussel Beach is on the immediate north side of Redwood Creek at the end of a single lane access road that parallels the north levee. Signs are posted at all vehicle beach access points stating that the beaches are closed to all vehicles, with the exception of permit holders.

Gold Bluffs Beach (CSP and NPS) is the area of sandy beach beginning at the north end of Mussel Point and continuing to a rocky headland at the northern limit of Carruther's Cove (see Appendix A, Map 2). This stretch of beach covers approximately 10.7 miles (17.2 km) and is bisected by the mouths of several creeks, including Major, Espa, Squashan, Home, Boat, Butler, Ossagon, and Johnson. There is one gated and locked access point for permitted vehicles along the southern portion of Gold Bluffs Beach, approximately one mile north of the entrance station. Signs are posted at the vehicle beach access point stating that the beach is closed to all vehicles, with the exception of permit holders.

Crescent Beach (NPS) is the area of sandy beach beginning at the north end of Crescent Beach Overlook and extending approximately 1.6 miles (2.6 km) north to the Redwood National Park boundary line (see Appendix A, Map 1). Vehicle access to Crescent Beach is via South Beach, through an access point off U.S. Highway 101. Del Norte County manages South Beach, which is contiguous with Crescent Beach. Signs are posted at the South Beach access point, stating that driving on South Beach is prohibited without a permit. There are no gated and locked access points for permitted vehicles entering Crescent Beach from South Beach. However, the boundary between South Beach and

Crescent Beach is posted with a large sign notifying drivers that vehicles are prohibited with the exception of commercial fishers.

Vehicle Beach Access Permits

Permits for commercial fishing and sport fishing for the mobility impaired are issued annually. A summary of the types of permits and how each of them is applied to the areas with permitted vehicle beach access is included below.

Commercial Fishing

Beaches north and south of Redwood Creek: To gain vehicle beach access commercial fishers, holding permits issued between March 1996 and September 1, 1999, may obtain their annual permits through a system administered by the National Park Service at South Operation center (SOC) in Orick. This type of permit is not transferable, but will be re-issued to a different applicant if allowed to expire. No new permits will be issued.

Gold Bluffs Beach: The permit system for this beach is administered by the California State Park staff stationed at SOC. To obtain vehicle beach access, commercial fishers must possess a special use permit. Pursuant to the RNSP General Management Plan/General Plan only those commercial beach fishers that held a permit issued between March 1996 and September 1, 1999 are allowed vehicle beach access. The permit-year runs from 1 April through 31 March and permits are renewed throughout the year. However, locks on access gates are changed on 1 April of each year and new keys are issued only with permit renewal. If not renewed within the year, permits are considered expired and will not be reissued at a later date. Permits are not transferable, and no new permits will be issued.

Crescent Beach: To gain vehicle beach access commercial fishers, holding permits issued between March 1996 and September 1, 1999, may obtain their permits annually through a system administered by Redwood National Park headquarters. No new permits will be issued. Commercial fishers wishing to access Crescent Beach receive a copy of a federal permit with conditions applicable to National Park beaches, and a map delineating county and NPS beaches and access points. This type of permit is not transferable and will not be re-issued if allowed to expire. **Note- this permit is combined with the Crescent Beach sport-fishing permit for mobility-impaired persons (see below).**

Sport Fishing for Mobility Impaired Persons

Beaches north and south of Redwood Creek: To gain vehicle beach access sport fishers, that have satisfactorily demonstrated proof of permanent mobility impairment, may obtain an annual permit through a system administered by National Park rangers at the south district. Permits are issued at any time of year. There are no restrictions on the

number of permits that may be given out from year to year. However, there are plans to eventually phase out this type of permit.

Gold Bluffs Beach: No permits of this type are issued for Gold Bluffs Beach.

Crescent Beach: To gain vehicle beach access, sport fishers, that have satisfactorily demonstrated proof of permanent mobility impairment, may obtain a permit through a system administered by Redwood National Park headquarters. Sport fishers wishing to access Crescent Beach receive a copy of a federal permit with conditions applicable to National Park beaches, and a map delineating county and NPS beaches and access points. Permits are issued at any time of year. There are no restrictions on the number of permits that may be given out from year to year. However, there are plans to eventually phase out this type of permit. **Note- this permit is combined with the Crescent Beach commercial fishing permit (see above).**

Yurok Native American Traditional Activities Permits

Traditional activities permits are issued only on Gold Bluffs Beach to members of the Yurok tribe for traditional food gathering for personal use. Yurok Native Americans apply for their permits annually through a system administered by the State Park staff stationed at SOC. All permit holders must possess a valid sport-fishing license and have that license in their possession when driving on the beach. The stipulations and conditions of the permit are similar to those spelled out on the commercial and sport fishing permits. There are no plans to phase out this permit type, and no restrictions on the number of permits that may be issued from year to year.

Permit Revisions

Permit revisions take place periodically, when necessary. For example, in 2002 the waveslope definition was revised (see below):

Wave slope definition. The definition of the wave slope on the original Crescent Beach permit read **“Wave slope is defined as the area that will be wet by the wave action of the next high tide, but does not include any vegetated area.”** This definition is now the same as that on the other beach access permits and now reads **“Wave slope is defined as the area that was wet by the wave action of the previous high tide, and does not include the upper beach berm or any vegetated areas. (If a high tide prevents driving on the beach without driving onto vegetated areas, then the driver must wait for a lower tide before proceeding.)”**

Another revision in 2002 concerned firewood collection (see below):

“Driftwood may not be gathered within the park except for use as firewood in an established fire ring within the park or on the beach below the wave slope, outside of burnable vegetation.” This condition was included on the Crescent Beach permits to

distinguish it from the condition under which wood may be gathered on the county beach, where cutting and collecting firewood or driftwood for other than on-site use is allowed.

The current permits contain revisions relative to the presence of snowy plovers.

Appendix C. Training requirements necessary for conducting Western Snowy Plover surveys and other activities (from Appendix J, pages J-2 – J-3, Western Snowy Plover Final Recovery Plan, USFWS 2007)

Training and Qualifications

Prospective snowy plover surveyors should have good vision, the ability to spend several hours in the sun, and the ability to walk long distances in loose sand. In addition, the U.S. Fish and Wildlife Service has developed minimum training requirements for western snowy plover survey, management, and research activities. Five activity levels are recognized:

- Level 1 Winter surveys, or surveys outside known nesting areas.
- Level 2 Breeding season surveys and censuses.
- Level 3 Erecting exclosures around nests.
- Level 4 Breeding season studies or surveys that include handling eggs.
- Level 5 Banding and color marking adults or chicks.

While activity levels 1 through 5 are increasingly intrusive, they are not strictly sequential. For example, a field worker may receive training and be certified at level 3, but cannot participate in level 1 or 2 activities without training specific to those levels.

No section 10(a)(1)(A) permit is required for Level 1 activities, but training is encouraged. Level 2, 3, 4, and 5 activities require a section 10(a)(1)(A) permit from the U.S. Fish and Wildlife Service. Field workers must be certified at the appropriate activity level to qualify for a permit, or to work independently under the holder of an existing permit.

Classroom instruction (or equivalent field instruction) will be made available for those involved with snowy plover surveys, management, and research (recovery task 1.1.5). At least 4 hours of instruction are required, on topics including:

1. Biology, ecology, and behavior of snowy plovers;
2. Identification of adult plovers, their young, and their eggs;
3. Threats to plovers and their habitats;
4. Survey objectives, protocols, and techniques;
5. Regulations governing the salvage of carcasses or eggs;
6. Special conditions of the existing Recovery Permit;
7. Other activities (for example: banding, determining incubation stage, erecting exclosures).

In addition, field instruction is required for activity levels 2, 3, 4, or 5. Instruction should take place under the direct supervision of a 10(a)(1)(A) permit holder. Activities for field training include:

1. Locating, identifying, and monitoring nests (levels 2, 4, and 5);
2. Handling eggs and capturing and handling adults or chicks (levels 4 and 5);
3. Erecting exclosures around nests (level 3).
4. Specifics on the target activity for which a permit has been issued;
5. Practical field exercises;
6. Field review of appropriate classroom topics.

Previous experience with snowy plovers, piping plovers, or other closely-related species will not substitute for the training described above. Further detail on obtaining permits, or becoming certified to work under an existing permit, is available through these offices:

CALIFORNIA

U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825
(916) 414-6600

U.S. Fish and Wildlife Service
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003
(805) 644-1766

U.S. Fish and Wildlife Service
Arcata Fish and Wildlife Office
1125 16th Street, Room 209
Arcata, California 95521-5582
(707) 822-7201

U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92011
(760) 431-9440

OREGON

U.S. Fish and Wildlife Service
Newport Fish and Wildlife Office
2127 S.E. OSU Drive
Newport, Oregon 97365-5258
(541) 867-4550

U.S. Fish and Wildlife Service
Oregon State Office
2600 SE 98th Avenue, Suite 100
Portland, Oregon 97266
(503) 231-6179

WASHINGTON

U.S. Fish and Wildlife Service
Western Washington Office
510 Desmond Dr SE, Suite 102
Lacey, Washington 98503
(360) 753-9440

Appendix D. RNSP Contacts

Within the RNSP Partnership, each agency maintains management authority for their lands based on their respective regulations, policies, and guidelines. As such, it is imperative that the appropriate staff (based on management authority) are identified and contacted regarding management issues.

National Park Service (RNP)

Steve W Chaney, Superintendent
(707) 465-7300

California State Parks (NCRD)

Jeff Bomke, RCS Superintendent
707-465-7332

Resource Management

Terry Hofstra, Division Chief
707-465-7700

Jay Harris, Program Manager
707-445-6547 x19

Lead Contact

Aida Parkinson, Wildlife and Fisheries Branch
Chief
(707) 465-7703

Lead Contact

Amber Transou, Environmental Scientist
707-445-6547 x14

Keith Bensen, Fish and Wildlife Biologist
(707) 465-7777

Michelle Forsys, Environmental Scientist
707-677-3109

Kristin Schmidt, Wildlife Biologist
(707) 465-7741

Interpretation

Lead Contact

Rick Nolan, Chief of Interpretation Division
(707) 465-7304

Susan Doniger, District Interpreter
(707) 445-6547 x 20

Lead Contact

Marnin Robbins, Interpreter I
(707) 445-6547 x29

Visitor Services and Resource Protection

Lead Contact

Marshall Neeck, Chief Park Ranger
707-465-7302

Lead Contact

Brett Silver, Supervising Ranger
(707) 465-7331