

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA
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**RECORD PACKET COPY**

October 25, 2001

TO: Commissioners and Interested Persons

FROM: Charles Damm, Senior Deputy Director
Gary Timm, District Manager
Shana Gray, Coastal Program Analyst

RE: **Notice of Impending Development 1-01, Pursuant to the University of California Santa Barbara Certified Long Range Development Plan (LRDP) for Public Hearing and Commission Action at the meeting of November 16, 2001, in Los Angeles.**

SUMMARY AND STAFF RECOMMENDATION

The impending development consists of the closure and restoration of the 190-meter (623 ft.) "Delta Trail" and the addition of educational signage at Coal Oil Point Reserve (COPR) located on the West Campus at University of California, Santa Barbara (Exhibit 1) in an effort to protect the western snowy plover (*Charadrius alexandrinus nivosus*), a federally listed threatened species. The project includes: (1) closure and restoration of the approximately 190-meter (623 ft.) Delta Trail which extends from the existing parking lot to the eastern margin of Devereux Slough; (2) construction of a wildlife permeable fence to deter alternate access to the Delta Trail area; and (3) installation of signs stating that dogs must be on a leash. The Delta Trail is not designated as a beach accessway in the Long Range Development Plan (LRDP). Rather, the LRDP provides for beach access to this area at the "Main Entrance" trail. These measures are proposed in conjunction with an overall program to protect snowy plover habitat at the Reserve. The University has submitted a concurrent coastal development permit application (CDP 4-01-139) for the portion of the project within the retained jurisdiction of the Coastal Commission.

The required items necessary to provide a complete notice of impending development were received in the South Central Coast Office on October 25, 2001, and the notice was deemed filed on October 25, 2001. Staff is recommending that the Commission determine that the impending development **is consistent** with the certified University of California at Santa Barbara Long Range Development Plan (LRDP) with three special conditions regarding (1) a Habitat Restoration and Monitoring Program, (2) Project Monitoring and

Responsibilities, and (3) a Signage Program which are necessary to bring the development into conformance with the LRDP.

SUBSTANTIVE FILE DOCUMENTS: 1990 Long Range Development Plan (UCSB, 1990); Status, Trends and Conservation of the Western Snowy Plover with a Focus on the Devereux Slough Population at Coal Oil Point Reserve, Santa Barbara County (Lafferty, 2000); Disturbance to Wintering Western Snowy Plovers (Lafferty 2001a); Birds at Southern California Beach: Seasonality, Habitat Use and Disturbance by Human Activity (Lafferty 2001b); Snowy Plover Docent Manual (COPR 2001); Western Snowy Plover (*Charadrius alexandrinus nivosus*) Pacific Coast Population Draft Recover Plan (USFWS 2001).

I. PROCEDURE

Section 30606 of the Coastal Act and Article 14, §13547 through §13550 of the California Code of Regulations govern the Coastal Commission's review of subsequent development where there is a certified LRDP. Section 13549(b) requires the Executive Director or his designee to review the notice of impending development (or development announcement) within ten days of receipt and determine whether it provides sufficient information to determine if the proposed development is consistent with the certified LRDP. The notice is deemed filed when all necessary supporting information has been received.

Within thirty days of filing the notice of impending development, the Executive Director shall report to the Commission the pendency of the development and make a recommendation regarding the consistency of the proposed development with the certified LRDP. After public hearing, by a majority of its members present, the Commission shall determine whether the development is consistent with the certified LRDP and whether conditions are required to bring the development into conformance with the LRDP. No development shall commence until after the Commission votes to render the proposed development consistent with the certified LRDP.

II. STAFF RECOMMENDATION: MOTION AND RESOLUTION

MOTION: *I move that the Commission determine that the development described in the Notice of Impending Development 1-01, as conditioned, is consistent with the certified University of California at Santa Barbara Long Range Development Plan.*

STAFF RECOMMENDATION:

Staff recommends a **YES** vote. Passage of this motion will result in a determination that the development described in the Notice of Impending Development 1-01, as conditioned, is consistent with the certified University of

California at Santa Barbara Long Range Development Plan and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO DETERMINE DEVELOPMENT IS CONSISTENT WITH LRDP:

The Commission hereby determines that the development described in the Notice of Impending Development 1-01, as conditioned, is consistent with the certified University of California at Santa Barbara Long Range Development Plan for the reasons discussed in the findings herein.

III. SPECIAL CONDITIONS

1. Habitat Restoration and Monitoring Program

Prior to the commencement of development, the applicant shall submit a three (3) year Habitat Restoration and Monitoring Program, prepared by a qualified biologist or environmental resource specialist, for review and approval by the Executive Director. The plans shall incorporate the following criteria:

A) Restoration Plan

- (1) All disturbed areas of the former Delta Path shall be planted and maintained for habitat restoration and erosion control purposes. All revegetation shall consist of native plant species endemic to area. Invasive, non-indigenous plant species which tend to supplant native species shall not be used. Such planting shall be adequate to provide 90 percent coverage within three (3) years.
- (2) The plans shall identify the species, extent, and location of all plant materials and shall specify that the Delta Path shall be cleared of any debris, weeded of any non-native species, and replanted with seeds and cuttings of native species found in the local watershed.
- (3) The plans shall outline revegetation and habitat enhancement performance standards to ensure that restoration in the project area is adequate to provide 90 percent coverage by the end of the three (3) year monitoring period. Habitat enhancement sites shall not be considered successful until they are able to survive without additional outside inputs such as supplemental irrigation.
- (4) All development approved herein shall be undertaken in accordance with the final approved plans. Any proposed changes to the approved final habitat restoration plans shall be reported to the Executive Director. No changes to said plans shall occur

without a Coastal-Commission Notice of Impending Development, unless the Executive Director determines that no additional Notice of Impending Development is required.

B) Monitoring

Three years from the date of the completion of the project the applicant shall submit for the review and approval of the Executive Director, a habitat restoration monitoring report, prepared by a qualified biologist or environmental resource specialist, that certifies whether or not the plantings at all areas of the site are in conformance with the habitat restoration plan approved pursuant to this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the restoration monitoring report indicates the plantings are not in conformance with or has failed to meet the performance standards specified in the restoration plan approved pursuant to this Notice of Impending Development, the applicant, or successors in interest, shall submit a revised or supplemental restoration plan for the review and approval of the Executive Director. The revised restoration plan must be prepared by a qualified biologist or environmental resource specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan.

2. Project Monitoring and Responsibilities

Prior to the commencement of development, the applicant shall retain the services of an environmental resource specialist(s) with appropriate qualifications acceptable to the Executive Director. The resource specialist(s) shall be present on site during all habitat restoration activities. The resource specialist(s) shall immediately notify the Executive Director if unpermitted activities occur or if any native vegetation is removed or impacted. This monitor shall have the authority to require the applicant to cease work should any breach in permit compliance occur, or if any unforeseen sensitive habitat issues arise. If significant impacts or damage occur to any native flora/fauna on site, the applicant shall be required to submit a revised, or supplemental, restoration program to adequately mitigate such impacts. Any native vegetation which is destroyed or damaged during implementation of the project shall be replaced in kind at a 3:1 or greater ratio.

3. Signage Program

Prior to the installation of any signage on site, the applicant shall submit, for the review and approval of the Executive Director, plans adequate to show the location, size, design, and language to be used for all signs to be installed.

IV. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

A. Long Range Development Plan Background

On March 17, 1981, the University's Long Range Development Plan (LRDP) was effectively certified by the Commission. The LRDP has been subject to ten major amendments. Under LRDP Amendment 1-91, the Commission reviewed and approved the 1990 UCSB LRDP; a 15-year long range planning document, which substantially updated and revised the certified 1981 LRDP. The 1990 LRDP provides the basis for all new physical and capital development on campus. Coal Oil Point Reserve, located on West Campus, is part of the University-wide Natural Reserve System. The 1990 LRDP provides that allowable development within Coal Oil Point Reserve may include minor development to support research activities, public access and trail improvements, and the development of reserve management and maintenance programs. The proposed project is intended to protect the federal threatened western snowy plover through closure and restoration of a trail that is not designated as a beach accessway in the LRDP and installation of informational signage. The project is part of an overall management and maintenance program for Coal Oil Point Reserve to enhance habitat and public resources and is consistent with the new development policies of the LRDP.

B. Description of Impending Development

The impending development consists of the closure and restoration of the 190-meter (623 ft.) "Delta Trail" and the addition of educational signage at Coal Oil Point Reserve (COPR or Reserve) located on the West Campus at University of California, Santa Barbara (Exhibit 1) in an effort to protect the western snowy plover (*Charadrius alexandrinus nivosus*), a federally listed threatened species. The project includes: (1) closure and restoration of the approximately 190-meter (623 ft.) Delta Trail which extends from the existing parking lot to the eastern margin of Devereux Slough; (2) construction of a wildlife permeable fence to deter alternate access to the Delta Trail area; and (3) installation of signs stating that dogs must be on a leash. The Delta Trail is not designated as a beach accessway in the Long Range Development Plan (LRDP). Rather, the LRDP provides for beach access to this area at the "Main Entrance" trail. These measures are proposed in conjunction with an overall program to protect snowy plover habitat at the Reserve. The University has submitted a concurrent coastal development permit application (CDP 4-01-139) for the portion of the project within the retained jurisdiction of the Coastal Commission.

The project site is located in the southern portion of Coal Oil Point Reserve, east of Devereux Slough, from the developed coastal blufftop down to Sands Beach, west of Coal Oil Point (Exhibit 2). The existing undeveloped areas in the project zone include dune swale habitat, foredune habitat, coastal sage scrub, slough margin, active slough, and sandy beach. Although the project site is not specifically designated as environmentally sensitive habitat by the LRDP, the Delta Trail crosses through plant communities that provide habitat for some unique and sensitive species, including habitat occupied by western snowy plover (Exhibits 3a-3b). In this case, the snowy plover roost has been identified as critical habitat for the federal-threatened western snowy plover and subsequently requires special management consideration and protection. Therefore, the project area is considered an environmentally sensitive habitat area (ESHA).

The Reserve is a known overwintering site for the western snowy plover, allowing the birds to rest and feed to build up the fat reserves needed for reproduction. Data from the COPR surveys indicates that plovers spend ten to eleven months out of the year at COPR, moving out only to breed during the summer. Snowy plovers were known to breed historically at COPR but had presumably stopped breeding successfully, or had limited and irregular success, in the area since 1965. Recently (June 2001), two snowy plover chicks were observed at Sands Beach. (Sandoval, pers. comm.)

Under this Notice of Impending Development (NOID), the Reserve proposes to permanently retire the Delta Trail and route pedestrian traffic to the LRDP-designated coastal access point approximately 300 meters to the south (Exhibit 4). The Delta Trail extends approximately 190 meters (623 ft.) from the trailhead to the mouth of the slough. From the trailhead, the Delta Trail traverses dune swale habitat, through the foredunes, into the slough margin, to outlet at the slough mouth. The Delta Trail channels users to the slough mouth, the main roost area for the snowy plover. The Delta Trail also crosses habitats that support other sensitive species, including a population of the endangered Salt Marsh Milkvetch, foredune habitat of the Globose Dune Beetle (*Coelus globosus*), and slough margin habitat of the rare Tiger Beetle (*Cicindela hirticollis grvida*).

The Delta Trail, proposed to be closed, is not a designated access point in the LRDP. The alternative access to the Delta Trail, the Main Entrance to Sands Beach, is located approximately 300 meters southeast of the Delta Path trailhead and is the official LRDP-designated access point. Access to Sands Beach from adjoining beaches, the Dune Pond Path, West Perimeter Path and via the Main Entrance near the Cliff House will remain open for pedestrian access (Exhibit 5). Closure of the proposed section of the Delta Trail (Exhibit 2) will, therefore, not affect public access to Sands Beach as alternative routes (illustrated in Exhibit 5) remain available.

The path to the Main Entrance from the Cliff House parking lot follows the portion of the Reserve developed with a road, manager's residence and Cliff House seminar facilities. At the top of the bluff, the Main Entrance has been developed with a U-shaped gate and chainlink fence to keep out motorcycles, which are not allowed on the beach. The blufftop is further developed with public benches, bicycle racks, and an existing kiosk which presently holds information on the snowy plover (Exhibit 6). From the Main Entrance, the path crosses through the foredunes for approximately 40 meters until outletting at Sands Beach, southeast of the slough mouth.

Under the proposed project, the Reserve would permanently close the Delta Trail and restore the disturbed area by planting it with seeds and cuttings of native species found in the area, including coyote bush, golden bush, lemonade berry and quailbush which are present near the path. The closure of the Delta Trail would be further implemented through the installation of a 710-foot long 3-rail wood fence. The fence would be 4.5 feet high with a green chainlink mesh that would be lifted 8 inches above the ground to allow passage of wildlife. The fencing would align the south and west sides of existing roadways, from the Delta Path trailhead to the clustered development near the Main Entrance (Exhibit 2). This fence will serve to deter pedestrians and equestrians from creating new paths to the Delta Path and mouth of the slough.

As specified in the University's 1990 certified Long Range Development Plan, approximately half of COPR is open to the public, including Sands Beach. This is the area of the Reserve most used by the public for recreation. People can access Sands Beach from adjacent beaches to the east and to the west, and through and around the Reserve in four locations (Exhibit 5). To the east of the Reserve, there are a number of pedestrian access points from the blufftop to the beach along the approximately 3½ miles of coastline contiguous with the Campus and community of Isla Vista. To the west, the public has accessed the beach by utilizing the Reserve trail directly west of the slough (Dune Pond Path), skirting around the perimeter of the 40-acre parcel of University property (West Perimeter Path), near the Venoco Oil Tanks (Exhibit 5), and further to the west via a number of volunteer trails around Ellwood Shores. The nearest designated official public access point west of the site is more than eight miles upcoast at El Capitan State Beach; however, the Devereux site is not accessible from this point.

Coal Oil Point Reserve is one of 34 University of California (UC) reserves administered by the Natural Reserve System (NRS). The NRS is responsible for managing research, education, and stewardship of the Reserve. The purpose of the Reserve System is to protect and manage specific University-owned natural areas containing environmentally sensitive resources for the purpose of teaching and research. A majority of the Reserve lies within the jurisdiction of the

approved Long Range Development Plan (LRDP) for UCSB and is therefore subject to the policies of the LRDP, including resource protection and access policies. In addition to fulfilling the mission of the NRS and meeting the policies of the LRDP, management measures at the Reserve are further constrained by overriding resource protection laws, such as the Endangered Species Act which makes it unlawful to accidentally or intentionally "take" a federally-listed species, such as the snowy plover, without a permit.

Concerns over the potential "take" of species under Section 9 of the ESA (see Section D(1) for details on the Regulatory Background) has led the NRS develop a management strategy to protect the existing snowy plover from human-related disturbances to the main roost area. Research conducted at Sands Beach at COPR indicates that a majority of disturbances to plovers originate from beach recreation and pets, with additional disturbance attributed to predators such as crows. Generally, these disturbances do not result in the mortality of wintering birds, however, disturbances do interfere with the birds' ability to rest and feed which ultimately effects their ability to build up fat reserves for reproduction and survivorship. The physical measures proposed under this project will be supplemented by ongoing efforts that include public education, beach cleanups, and weed removal. In addition, the Reserve is working with the UCSB police to enforce the prohibition of off-leash dogs and other regulations.

C. Overall Snowy Plover Management Program

The measures proposed to be implemented pursuant to this notice of impending development are part of a larger undertaking to protect the western snowy plover population utilizing the Reserve. Concurrent with this NOID, the University has submitted a coastal development permit application (CDP 4-01-139) to implement management measures, including fencing and signage, to create a restricted snowy plover roost area within the Commission's retained permit jurisdiction. Development proposed pursuant to CDP 4-01-139 includes (1) installation of year around vertical cable fencing along the eastern and western limits of the main roost area to create a 400-meter (1,312-foot) restricted roost area near the mouth of Devereux slough; (2) installation of "no trespassing" signs around the roost; and (3) installation of signs on either side of the roost fence stating that the area is snowy plover habitat and to bypass the area by utilizing the wet sand corridor. The main roost area spans approximately ¼-mile with the mouth of the slough at its center. The measures undertaken pursuant to CDP 4-01-139 would be interim measures, authorized for two years from issuance of the coastal development permit to allow the applicant to monitor the effectiveness of the project. The project term may be extended for one additional year, at the discretion of the Executive Director, for good cause.

D. Environmentally Sensitive Habitat Area

The LRDP contains several policies regarding the protection and management of coastal waters and sensitive habitat areas. Sections 30230 and 30231 of the Coastal Act, which have been included in the certified LRDP, require that marine resources and the biological productivity of coastal waters, including wetlands, shall be maintained and, where feasible, enhanced. Consistent with Sections 30230 and 30231 of the Coastal Act, LRDP Policies 30231.1 and 30231.2 provide for the protection of coastal waters and wetlands from increased sedimentation, erosion, excavated materials, construction debris, and contamination from chemical wastes and other pollutants. Further, Section 30240 of the Coastal Act, which has been included in the certified LRDP, provides that environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values and that development in areas adjacent to such areas shall be sited and designed to prevent impacts which would significantly degrade such areas. Consistent with Section 30240 of the Coastal Act, LRDP Policies 30240(a).2 and 30240(a).6 provide that existing fences, signs, and information maps be maintained and additional signs be posted to restrict unauthorized access to the Reserve by pedestrians, dogs, motor vehicles, and off-road bicycles. The LRDP is silent on the issue of equestrian use of the Reserve, and therefore equestrian use is considered generally under environmentally sensitive habitat and public access policies.

As described previously, the proposed project subject to this NOID includes the restoration of 190-meter (623 ft.) trail to close off pedestrian and equestrian traffic to the main roost area of the federally-listed western snowy plover near the mouth of Devereux Slough. The project also entails the construction of a 710-foot fence to reinforce the path closure, and it further includes the installation of signage to alert the public to the importance of the snowy plover at the Reserve and to encourage compliance with existing rules.

The measures proposed to be implemented pursuant to this notice of impending development are part of a larger undertaking to protect the western snowy plover population utilizing the Reserve. The proposed project will be supplemented by ongoing Reserve efforts regarding public education, beach cleanups, and weed removal at COPR. In addition, the Reserve is working with the UCSB police to enforce the prohibition of off-leash dogs and other regulations.

The existing undeveloped areas in the project zone include dune swale habitat, foredune habitat, coastal sage scrub, slough margin, active slough, and sandy beach. Although the project site is not specifically designated as environmentally sensitive habitat by the LRDP, the Delta Trail crosses through plant communities that provide habitat for some unique and sensitive species, including habitat occupied by western snowy plover (Exhibits 3a-3b). In this case, the snowy plover roost has been identified as critical habitat for the federal-threatened

western snowy plover and subsequently requires special management consideration and protection. Therefore, the project area is considered an environmentally sensitive habitat area (ESHA).

The Reserve has initiated this program of action over the concern that activities at the Reserve could violate Section 9 of the Endangered Species Act which prohibits the "take" of federally-listed species.

1. Regulatory Background

The U.S. Fish and Wildlife Service listed the Pacific Coast population of the western snowy plover as "threatened" in March 1993 under the Endangered Species Act (ESA) of 1973, as amended. The ESA makes it unlawful, among other activities, to "take" a species listed pursuant to the ESA. "Take" as defined under Section 3 of the Endangered Species Act, means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect this species, or to attempt to engage in any such conduct." Under the ESA, "species" includes snowy plover eggs as well as adults and chicks.

In December 1999, the USFWS published its final rule designating critical habitat for the western snowy plover. Critical habitat is a specific designation that identifies areas that are essential to conservation of an endangered species. "Critical habitat" is defined under Section 3 of the ESA, 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 consideration or protection and; (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon determination that such areas are essential for the conservation of the species."

The designation of critical habitat requires that all *federal* agencies review their proposed actions and consult with the Service to ensure that any activity they fund, authorize, or carry out does not adversely modify or destroy critical habitat. Activities that are carried out solely by a state or local agency, or a private entity or private party including the University are not directly affected by the designation. However, the designation alerts the public that the area is important for the conservation of the species.

Twenty-eight areas along the coast of California, Oregon, and Washington have been identified by the USFWS as critical habitat for the western snowy plover (Federal Register, Vol. 64, No. 234). Three of these areas are within Santa Barbara County. The three critical habitat area in Santa Barbara County have been further categorized into six units, including the Devereux Beach unit which includes all of the coastline along Coal Oil Point Reserve (Exhibit 7).

The USFWS has recently released a Draft Recovery Plan for the Pacific Coast Population of Western Snowy Plover (May 2001). The primary recovery objective is to "remove the Pacific coast western snowy plover population from the *List of Endangered and Threatened Wildlife and Plants* by: (1) achieving well-distributed increases in numbers and productivity of breeding adult birds, and (2) providing for long-term protection of breeding and wintering plovers and their habitat." The recovery plan is intended to serve as a guidance document for interested parties including federal, state, and local agencies, private landowners, and the general public. The Recovery Plan identifies Devereux Beach, which includes Sands Beach, as one of twelve breeding and/or wintering sites located in Santa Barbara County targeted for management.

2. Western Snowy Plover

The Pacific Coast population of western snowy plover is a small shorebird that uses sandy beaches for nesting and roosting from southern Washington to Baja California. At most, approximately 2,000 snowy plovers may breed along the U.S. Pacific Coast with a similar number breeding along the Baja California coast (USFWS 2001 citing Page et al. 1995a).

Research has indicated that there has been a general decline in the West Coast population of snowy plover, including a substantial decrease between 1962 and 1984 in the abundance of wintering snowy plovers in southern California (Lafferty 2000 citing Page et al. 1986). Information provided by Page et al. (1991) indicated that between 1981 and 1991, snowy plovers experienced at least an 11 percent decline in abundance. Lafferty (2000) further reports that more recently, there has been a decline of about 30% throughout the region (in the late 1990s). Among the factors linked to the regional decline in snowy plovers includes predation, beach erosion, encroachment of exotic vegetation and disturbance from recreation (Lafferty 2000 citing Page et al. 1995).

Exhibit 3 illustrates the main habitats used, or potentially used, by snowy plovers at Sands Beach. Plovers roost in the dry sand (upper beach) area and feed in the kelp rack zone between the dry sand and the wet sand and in the wet sand around the mouth of the slough. Appropriate breeding habitat for snowy plovers encompasses the foredune area, which includes the upper beach and bare dune areas.

Specifically, as reported by Lafferty 2000 (pg. 11), snowy plovers roost at Coal Oil Point Reserve:

... among cobble, drift, and depressions on a sandy delta formed by the mouth of Devereux Slough. This area is known locally as Sands Beach. Roosting birds are usually concentrated in one or two dense aggregations in dry sand near the mouth of the Slough...

Roosting snowy plovers typically sit in small depressions (such as human footprints) in the dry sand or, when the wind is blowing, in the lee of beach debris (Lafferty, 2001b). Lafferty (2001b) conducted weekly beach surveys throughout 1999 and 2000 to map the location of the plover roost along the 850 meters of critical habitat designated west of Coal Oil Point. Results from the study indicate that snowy plovers along the 850-meter stretch of beach (see Exhibit 3b), are concentrated in the dry sand at the mouth of the slough. As illustrated in Exhibit 2, the main roost area along the coast at COPR includes approximately ¼-mile stretch of upper beach with the slough mouth located roughly at its center. The utilization of potential roost habitat drops off sharply to the east of the slough and tapers off more gradually to the west. In the morning and the evening, snowy plovers leave the roost to forage along 700 meters of tidal margin including areas to the east and west of the main roost.

Due to the dynamic nature of the coastline, the character of the snowy plover habitat at Sands Beach is subject to significant alteration over the course of the year. Roosting snowy plovers may be displaced away from the slough mouth during winter as changes occur to the width of available beach and when the delta at the slough mouth is breached, typically during a couple of storm events each year.

At Devereux Slough, snowy plovers have historically been known to breed but had presumably stopped breeding successfully, or had limited and irregular success, in the area since 1965. Lafferty (2000) notes that nesting was known to occur along the sandy area forming the barrier across the mouth of Devereux Slough. Recent observations indicate that a female snowy plover nested and hatched at least two chicks in the area this past season. On June 20, 2001, the Reserve Manager observed a female exhibiting nesting behavior (nervous agitation) near the dunes by the rope fence. On June 27, 2001 a female snowy plover and two chicks were observed near the edge of the slough. One of the chicks was preyed upon by a crow within hours of the first sighting by the Reserve Manager and another biologist. Reserve staff and volunteers observed the situation for the following month, noting that the chick and adult male snowy plover foraged and roosted on dry and wet sand and around the edge of the slough. The preferred site for foraging was on the wet sand around the fresh kelp (for flies and beach hoppers). However, when the chick and male walked to the wet sand, often someone would jog or walk nearby and they returned to the dry sand. This was observed to happen several times a day.

The Reserve reports that up to 185 individuals winter at Devereux Slough. Individuals are typically present at Devereux Slough ten to eleven months out of the year, leaving the area to breed during the breeding season, which extends from March to mid-September. Trends in the seasonal variation in abundance were summarized by Lafferty (2000), utilizing ten years of data. Currently,

Devereux slough receives little or no use by snowy plovers in May and June since most plovers migrate to other locations to breed. Numbers start to rise in July as plovers return from breeding locations and peak in the winter months, from November to January. After January, the number of birds again begins to decline as the migration cycle gets underway.

Even with a relative decline in the region, available data for Coal Oil Point Reserve indicates that winter counts of snowy plover have generally increased from the early 1980s to the late 1990s (Lafferty 2000). This is "presumably due to an influx of individuals from nearby abandoned winter sites. In this sense, birds at Devereux are refugees from beach recreation in the region" (Lafferty 2000).

The population of wintering snowy plover at Devereux is subject to an array of disturbances from humans, dogs, horses, crows, and other birds. Generally, these disturbances do not result in the mortality of wintering birds, however, disturbances do interfere with the birds overall ability to forage or rest. Disturbance, as used in this report, refers to any activity that causes a bird to move or fly.

Lafferty's research (2001b) indicated that each wintering plover is disturbed an average of once every 27 minutes on the weekend and every 43 minutes on weekdays at Sands Beach. The research suggests that once a person walks within 15-20 meters of a wintering plover, plovers are disturbed. Plovers may become "alert, begin to walk away and displace each other from the depressions where they sit. They may elevate their wings or bob as a sign of distress and, if approached closely, run or take flight. If put into flight, flocks wheel back and forth for several minutes in tight, low altitude formations (Page et al. 1995). After landing, they remain nervous and will take wing with little prompting (Page et al. 1995)."

In particular, dogs can serve as a significant source of disturbance to snowy plovers. Dogs may disturb snowy plovers by their proximity, which Lafferty (2001b) found to have a higher probability of disturbing plovers than humans, at any particular distance. In addition, some dogs may directly disturb plovers by actively chasing them.

Little data is available regarding the impact of horses to snowy plovers at the site. Applicable studies were conducted during the mid-day hours between 10 a.m. and 2 p.m., a period which may not capture typical equestrian use of the site. Studies did note that during the mid-day, an average of less than one horse (0.8 horses) was observed to enter the Sands Beach area every hour during mid-day (Lafferty 2001b; 2000). This data applies to the 850-meter stretch of beach west of Coal Oil Point (see Exhibit 3b), not solely the proposed protected area at the mouth of the slough. Based on personal observation, the Reserve

Manager has noted an increasing amount of equestrian use within the interior of the Reserve and along Sands Beach (Sandoval, pers. comm.). The increase in equestrian use appears to be as a result of an unauthorized commercial operator that has been conducting guided horse tours with up to 8 or 10 riders at a time (Sandoval, pers. comm.). The commercial operation is not known to utilize the Delta Trail or slough mouth area (Sandoval, pers. comm.). These commercial activities are not authorized by the University and are currently being addressed by University officials (Sandoval, pers. comm.).

The beach survey and plover data collected at Sands Beach was utilized to determine the optimum location and distance of a protected plover area at Sands Beach. Specifically, Lafferty (2001a) evaluated the plover distribution and abundance, distance of a given activity and the probability of that activity causing a disturbance to plovers. During Lafferty's studies, few disturbances of any type occurred at greater than 30 meters. Lafferty (2001a) suggests that providing a 30-meter buffer zone around the roost and removing dogs as a disturbance factor could greatly reduce disturbance to the population of snowy plovers at the Reserve. Lafferty (2001a) developed a management model which found that "increasing the lateral length of beach that was hypothetically closed to human activity sharply increased the proportion of dates on which the plover roost was protected up until a distance of 400 meters, at which over 90% of the roosts and 96% of the plovers gained protection... Increasing the closed area beyond 400 m did not achieve as great a gain in protection per meter closed." Lafferty (2001a) further concluded that "protecting as little as half of the habitat where plovers are observed could protect plovers 90% of the time." Consistent with Lafferty's management model, the applicant proposes to delineate a 400-meter restricted roost area (under CDP 4-01-039) on Sands Beach where pedestrians and their pets are prohibited. The Delta Trail outlets to the proposed restricted habitat area. Consistent with the proposal to restrict access at the main plover roost, closure and restoration of the Delta Trail would route pedestrian and equestrian traffic away from and around the protected area.

3. Snowy Plover Protection Program

In Fall 2000, two 36" x 39" educational signs were placed within existing kiosks at the Reserve, one near the Main Entrance and the other at the trailhead of the Delta Path, to alert the public to the presence and significance of the snowy plover population at Devereux Slough. An image of this sign is provided as Exhibit 6 of this report. The Reserve collected data to assess the success of signage and its ability to reduce disturbance to plovers. Utilizing data from October to March of 1999 (prior to signage) and October to March 2000 (with signage), the Reserve reported that the frequency of disturbance (number of times each plover flies per hour) increased slightly after the signs were placed. There are likely a number of factors contributing to this slight increase. However, it is noteworthy that the amount of disturbance was not reduced, which suggests

that signs alone are not effective. The Reserve reports that beach users often comment that they read the interpretive snowy plover signs but are unable to find the plovers to avoid them. This is not surprising since plovers are very small and their markings tend to camouflage them on the beach.

Additional temporary protection measures were implemented after the discovery of a nesting snowy plover near the mouth of Devereux Slough in June 2001. At that time, the Reserve roped-off approximately 200 meters of the dry sand to delineate the habitat area. The fence is comprised of wood stakes and rope. To demark the restricted habitat area, two rope fences were placed perpendicular to the coastline, extending from the upper beach to an area well above the high tideline. These were placed approximately 200 meters apart around the slough mouth. Parallel to the beach and along the wet sand, signs were installed that request the public to walk on the wet sand. The fencing and signs were initiated as a temporary measure during the processing of the coastal development application (CDP 4-01-139) and notice of impending development (NOID 1-01).

In addition to these physical measures, the Reserve is implementing an extensive public education program to raise awareness in the local community of the importance of the preservation of the snowy plovers and their habitat. The educational program depends, in large part, upon volunteers to act as docents and communicate the importance of the program to the public. The Reserve has prepared a Snowy Plover Docent Manual and requires prospective docents to undergo a five-hour orientation and training session. Docents are located at the Main Entrance or roam the beach area to inform (not enforce) the public about the management program and the potential for recreational activities to impact the plover population.

The protection measures proposed to be implemented, pursuant to Coastal Development Permit Application 4-01-139 and this Notice of Impending Development (NOID 1-01), to protect snow plovers consists of three main efforts: (1) closing, restoring, and fencing off the Delta Path; (2) providing a protected 400-meter roost area; and (3) installing signage. The Reserve further intends to monitor the effectiveness of these actions.

Proposed Measures CDP 4-01-139

The measures that have currently been taken by the Reserve to delineate the habitat area are similar to the proposed snowy plover protection measures. The proposed area to be delineated by the roost fence would be 400 meters in length, double the present area. It will take a number of years for researchers to obtain meaningful statistical data regarding the success of the fencing. However, preliminary data from the present roped-off habitat area has indicated that double the number of plovers were found within the roped-off area in July and August 2001 than were counted during the same time frame for the previous

year, when the area was not roped off. In addition to use of the roped off area by the snowy plover, Reserve personnel observed federally endangered least tern within the area as nursing grounds for their recently fledged chicks. (Sandoval, pers. comm.)

These measures are more specifically addressed under Coastal Development Permit Application 4-01-139.

Proposed Measures NOID 1-01

Under this Notice of Impending Development, the Reserve proposes to permanently retire the Delta Trail and route pedestrian traffic to the LRDP-designated coastal access point approximately 300 meters (984 feet) to the south. The Delta Trail extends approximately 190 meters (623 ft.) from the trailhead to the mouth of the slough. From the trailhead, the Delta Trail traverses dune swale habitat, through the foredunes, into the slough margin, to outlet at the slough mouth. The Delta Trail channels users to the slough mouth which serves as a common roost area for the snowy plover. The Delta Trail also crosses habitats that support other sensitive species, including a population of the endangered Salt Marsh Milkvetch, foredune habitat of the Globose Dune Beetle (*Coelus globosus*), and slough margin habitat of the rare Tiger Beetle (*Cicindela hirticollis gravida*).

As proposed, the Delta Trail would be restored by planting it with seeds and cuttings of native species found in the area, including coyote bush, golden bush, lemonade berry and quailbush which are present near the path. The closure of the Delta Trail would be further implemented through the installation of a 710-foot long 3-rail wood fence. The fence would be 4.5 feet high with a green chainlink mesh that would be lifted 8 inches above the ground to allow passage of wildlife. The fencing would align the south and west sides of existing roadways, from the Delta Path trailhead to the clustered development near the Main Entrance (Exhibit 2). This fence will serve to deter pedestrians and equestrians from creating new paths to the Delta Path and mouth of the slough.

The Commission finds that continued use of the Delta Trail is incompatible with the protection of sensitive resources. The Commission further finds that the proposed closure of the Delta Trail will serve to restore and enhance sensitive habitats on site and that, therefore, such restoration is consistent with Section 30240 of the Coastal Act as included in the certified UCSB LRDP. However, to ensure that the proposed restoration and enhancement program is successful and that the subject area is adequately revegetated, the Commission imposes **Special Condition One (1)** which requires the University to clear all debris, weed any non-native species, and replant with seeds and cuttings of native species found in the local watershed. In addition, Special Condition 1 requires

the applicant to prepare a restoration and monitoring program, including performance standards to assess the success of the restoration plan.

Special Condition 1 further requires the University to submit a written report prepared by a qualified biologist or resource specialist, for the review and approval of the Executive Director, evaluating the extent of the success or failure of the restoration project. This report shall include further recommendations and requirements for additional revegetation activities in order for the project to meet the specified criteria and performance standards. At the end of a three year period, a final detailed report shall be submitted for the review and approval of the Executive Director. If the final report indicates that the revegetation component of the enhancement and restoration program has in part, or in whole, been unsuccessful, based on the approved performance standards, the applicant shall be required to submit a revised or supplemental program to compensate for those portions of the original program which were not successful.

Furthermore, to ensure that any potential adverse effects to adjacent habitat and sensitive species from restoration activities are minimized, **Special Condition Two (2)** requires the applicant to retain the services of a qualified biologist or environmental resource specialist to be present on site during all restoration activity. The monitor shall immediately notify the Executive Director if unpermitted activities occur, if any native vegetation is removed or impacted, or if any unforeseen habitat issues arise. If significant impacts or damage occur to any native flora or fauna on site, all work will temporarily cease and the monitor shall immediately contact the Executive Director. If significant impacts or damage occur to any native flora/fauna on site, the applicant shall be required to submit a revised, or supplemental, restoration program to adequately mitigate such impacts. Any native vegetation which is destroyed or damaged during implementation of the project shall be replaced in kind at a 3:1 or greater ratio.

In addition, the project includes the placement of signage on the site to inform the public about the existing rules that require dogs to be on leash in public areas. The signage will be placed at key access points into the Reserve. Dogs are prohibited in restricted portion of the Reserve and are subject to the standard leash laws in areas that are open to the general public. Research at the Reserve indicates that on average, approximately 7% of dogs are leashed in the Critical Habitat area at Sands Beach as required and approximately 21% of pets are leashed in the main plover roost (Lafferty 2001b).

The Commission finds that the protection of environmentally sensitive resources at COPR, including habitat for the snowy plover, necessitates improved notification and enforcement of existing regulations. Such signs are typically beneficial in nature by providing adequate notification prior to implementing enforcement actions and by discouraging uses incompatible with the

environmentally sensitive habitat areas. Furthermore, the implementation of a signage program at COPR is consistent with the LRDP policies which specifically require that signage be maintained to address unauthorized use and access to the Reserve, such as off-leash dogs. However, in this case, information regarding the final location, size, design, and language to be used has not been submitted as part of this NOID. Therefore, in order to ensure that the proposed signage is consistent not only with habitat protection, but also with the continued provision of public access and recreational opportunities, **Special Condition Three (3)** requires that prior to the installation of signage, that the University submit, for the review and approval of the Executive Director, plans adequate to show the location, size, design, and language to be used for all signs to be installed.

The Commission, therefore, finds that the notice of impending development, as conditioned, is consistent with the applicable LRDP policies with regards to environmentally sensitive habitat areas and the marine environment.

E. Public Access

Section 30210 of the Coastal Act, which has been included in the certified LRDP, mandates the provision of maximum public access and recreational opportunities, providing that such activities take into account natural resource protection needs. In addition, the LRDP contains several specific policies which provide for public access and recreation along the coast such as Policy 30210.2 which specifically provides that "public access to Campus beaches from adjoining beaches and all stairway or pathway access routes mapped in Figure 27 [provided as Exhibit 4 of this report] will remain open to protect the permanent right of the public for pedestrian access and appropriate recreation uses of the beach at all times, except as provided for in policy number 30210.17." The Delta Trail is not a designated access route in Figure 27.

LRDP Policy 30210.17 allows for the management of public access when public access is inconsistent with: (a) public health or safety; (b) natural disaster, civil disorders which pose a threat to property, or other such seriously disruptive events; (c) extraordinary measures which are required to immediately avert, alleviate, or repair damage to Campus property, or to maintain the orderly operation of the Campus; military security needs; (d) protection of fragile coastal resources; and (e) adequate nearby access.

In addition, a number of LRDP policies address signage and restrictions on the West Campus, which encompasses the Reserve. LRDP Policy 30210.10 provides that the University install interpretive signs on West Campus to highlight environmentally sensitive areas which could be damaged by excessive or unauthorized access. LRDP Policy 30210.19 requires trail access upcoast along the west campus bluff top to be marked with appropriate directional information

and cautions against intrusion into the fenced Reserve. LRDP Policy 30240(a)(6) allows for the posting of signs prohibiting unauthorized vehicles (except service and emergency vehicles), pedestrians and domestic pets from entering the Reserve, and LRDP Policy 30240(a)(2) requires that existing fences, signs and information maps around the perimeter of the Reserve be maintained to restrict unauthorized access by pedestrians, dogs, motor vehicles and off-road bicycles.

The proposed project includes the restoration of a 190-meter trail from the developed Reserve facilities, east of Devereux Slough to Sands Beach. There are two existing accessways in this area which terminate at the beach approximately 250 meters apart, the Delta Trail and the Main Entrance. The Delta Trail is a relatively steep-sloping trail whereas the Main Entrance allows a gentler and shorter approach from the blufftop to Sand Beach. The Delta Trail, proposed to be closed to public use and restored, channels users to the slough margin and into the primary snowy plover roost. The Delta Trail also crosses through habitats that support sensitive species such as the endangered Salt Marsh Milkvetch, foredune habitat of the Globose Dune Beetle (*Coelus globosus*), and slough margin habitat of the rare Tiger Beetle (*Cicindela hirticollis gravida*).

As stated previously, concerns over the potential "take" of species under Section 9 of the ESA (see Section D(1)) has led the Reserve to develop a management strategy to protect the existing snowy plover from human-associated disturbances to the main roost area. Research conducted at Sands Beach at COPR indicates that a majority of disturbances to plovers originate from beach recreation and pets, with additional disturbance attributed to predators such as crows. Generally, these disturbances do not result in the mortality of wintering birds, however, disturbances do interfere with the birds' ability to rest and feed which ultimately effects their ability to build up fat reserves for reproduction and overall survivorship. The physical measures proposed under this project will be supplemented by ongoing efforts that include public education, beach cleanups, and weed removal. In addition, the Reserve is working with the UCSB police to enforce the prohibition of off-leash dogs and other regulations.

Coal Oil Point Reserve is administered by the Natural Reserve System which manages research, education, and stewardship of the Reserve. The purpose of the Reserve System is to protect and manage specific University-owned natural areas containing environmentally sensitive resources for the purpose of teaching and research. Approximately 1/2 of the Reserve is closed to the general public, this includes roughly all of the territory from the eastern slough margin to the western property boundaries. However, in support of its teaching and research mission, the Reserve hosts visiting researchers, education activities by K-12 classes, community groups, and qualified non-profit organizations by special permission. Under the Natural Reserve System, recreational use is specifically prohibited to protect sensitive habitats, on-going research, and instructional

programs. Permission to utilize the restricted portion of COPR must be obtained from the NRS staff and will be granted only if such proposed activities will not harm the natural values of the reserve or preclude the present or future long-term use of the natural area for research or instruction.

There is an existing parking lot in the developed portion of the West Campus, near the Cliff House seminar facilities. Parking in this lot is limited and requires a special West Campus parking permit. LRDP policies specifically limit parking in this area to no more than 50 cars in order to protect the area from overuse. The Reserve reports that unauthorized parking is a chronic problem. In particular, people that arrive in vehicles can carry more items with them, contributing to litter, beach fires, and parties near the roost.

Dogs are prohibited in the restricted portion of the Reserve and are subject to Santa Barbara County's standard leash restriction in the areas open to the general public. Research at the A recent survey of Sands Beach indicated that on average, approximately 7% of dogs are leashed in the Critical Habitat area at Sands Beach as required and approximately 21% of pets are leashed in the main plover roost (Lafferty 2001b).

The access policies of the LRDP and Coastal Act, as incorporated into the LRDP, clearly provide for restricting public access and recreational opportunities in order to protect natural resource areas, such as habitat for threatened species. However, in order to understand the significance of the impact of the proposed restrictions, the Commission must analyze these access restrictions in the context of the existing access resources in the area.

As specified in the University's 1990 certified Long Range Development Plan, approximately half of COPR is open to the public, including Sands Beach. This is the area of the Reserve most used by the public for recreation. People can access Sands Beach from adjacent beaches to the east and to the west, and through and around the Reserve in four locations (Exhibit 5). To the east of the Reserve, there are a number of pedestrian access points from the blufftop to the beach along the approximately 3½ miles of coastline contiguous with the Campus and community of Isla Vista. To the west, the public has accessed the beach by utilizing the Reserve trail directly west of the slough (Dune Pond Path), skirting around the perimeter of the 40-acre parcel of University property (West Perimeter Path), near the Venoco Oil Tanks (Exhibit 5), and further to the west via a number of volunteer trails around Ellwood Shores. The nearest designated official public access point west of the site is more than eight miles upcoast at El Capitan State Beach; however, the Devereux site is not accessible from this point.

Equestrians utilize the Reserve to access the beach, through the Delta Trail and through trails west of the slough (Dune Pond Trail and West Perimeter Path

shown in Exhibit 5). Use of the Delta Trail by equestrians to access the beach is thought to be primarily associated with the stable located on University property near the Reserve that is run by the UCSB Horseboarders Association (Sandoval, pers. comm). Some of the approximately two dozen members of the UCSB Horseboarders Association use the Reserve's beach areas for riding. In addition, some equestrians trailer horses to the area to access the beach. The LRDP does not address equestrian use.

The LRDP shows two existing primary coastal access points at West Campus, one from the parking area east of the slough and another to the west of the slough. In addition, the LRDP specifically provides for coastal access from Isla Vista from the intersection of Camino Majorca and Del Playa Roads, along the bluff top to access Sands Beach through the Main Entrance to Sands Beach (as illustrated in Exhibit 4). None of these access points would be modified as a result of the proposed snowy plover protection measures. The Delta Trail, proposed to be closed, is not a designated access point in the LRDP. The alternative access to the Delta Trail, the Main Entrance to Sands Beach, is located approximately 300 meters southeast of the Delta Path trailhead and is the official LRDP-designated access point. Access to Sands Beach from adjoining beaches, the trail west of the slough (dune pond), the west perimeter path, and via the Main Entrance near the Cliff House will remain open for pedestrian access.

Lafferty (2000) reports that a majority of visitors bike or walk along the bluffs from Isla Vista and use the Main Sands Beach entrance. The Reserve staff has estimated approximately 35,000 beach users per year, as projected from data obtained by an automatic counter placed at the Main Gate.

In addition to its mission to protect the Reserve for its educational and research value, COPR is one of only two UC Reserves which allow public recreation. Approximately half of the Reserve is open to the public as specified in the University's 1990 certified Long Range Development Plan. The area of the Reserve most used by the public for recreation is Sands Beach. Studies conducted at Sands Beach identify several types of beach use by visitors, including walking, jogging, sunbathing, surfing, watching the sunset, attending parties, cleaning up the beach, walking dogs, birdwatching, painting, and riding horses.

Researchers noted several patterns of use at Sands Beach. For instance, beach users tended to use the wet sand for their activities while plovers concentrated in the dry sand areas. Lafferty (2001a) noted that human activities were substantially higher on weekends, low tides and warm days but visitor activities did not vary significantly among seasons. "Although one might expect summer beach crowds, winter months have as much activity, presumably due to surf, foggy summer weather and the fact that many students are away during summer

break. Human activity is lowest in the mornings and increases throughout the day but may decline in the afternoon if the wind blows strong (Lafferty 2001b)."

The University is proposing to close the Delta Trail as a result of the disturbance to the snowy plover roost due to pedestrian traffic and human-associated pet (dogs and horses) traffic. In addition, though bicycles, motorcycles, and other vehicles are prohibited, vehicle tracks are sometimes noted within the plover roost. The Delta Trail is likely a convenient way for motorcycles to access the beach, though motorcycles have been noted infrequently and prohibitions are actively enforced.

The users of the Delta Trail would be displaced to the Main Entrance, or in the case of equestrians, to the west of the slough. The Main Entrance is developed with a U-shaped gate which serves to exclude motorcycles and bicycles from accessing the beach in this location. Horses are also unable to utilize the Main Entrance, and equestrians would have to use existing trails to the west of the slough to access the beach area (Exhibit 5). No area of Sands Beach would become inaccessible to pedestrians or equestrians due to the Delta Trail closure.

From his research, Lafferty (2000) noted that "despite the relatively limited use the Delta Path receives, a disproportionate amount of the disturbance to snowy plovers is associated with it. Plovers react more intensely and at a greater distance to people entering the beach from the Delta Path than they do to people walking along the water's edge (Meeker 1996), creating a small but chronic stream of disturbance."

Section 30210, which has been incorporated into the LRDP, and additional LRDP policies require maximum public use consistent with resource protection. In this case, the snowy plover roost has been identified as critical habitat for the federal-threatened western snowy plover and subsequently requires special management consideration and protection. Present use of the area has been determined to contribute a chronic stream of disturbance to the plovers which may ultimately impact reproduction and survivorship.

The Delta Trail crosses through sensitive habitats and channels users directly through the main roost habitat of the plovers in order to access Sands Beach. Closure of the Delta Trail would serve to restrict prohibited activities such as motorcycle or mountain bicycle access through the Reserve and would further serve to divert pedestrian traffic away from the main roost to the Main Entrance. Public access to Sands Beach from adjoining beaches and the Main Entrance near the Cliff House will remain open to protect the permanent right of the public for pedestrian access. The accessway through the Reserve, to the west of the slough, would not be impacted. Existing trails utilized by equestrians to the west of Devereux Slough would also not be impacted by the proposed project. Since access will remain available through the Main Entrance and through trails to the

west of Devereux Slough, adequate access to the beach is maintained in the area. Therefore, the Commission finds that the closure of the Delta Trail would provide for greater protection of the environmentally sensitive habitat while allowing continued access for appropriate uses.

For the above mentioned reasons, the Commission finds that the notice of impending development as submitted is consistent with the applicable LRDP policies with regard to public access.



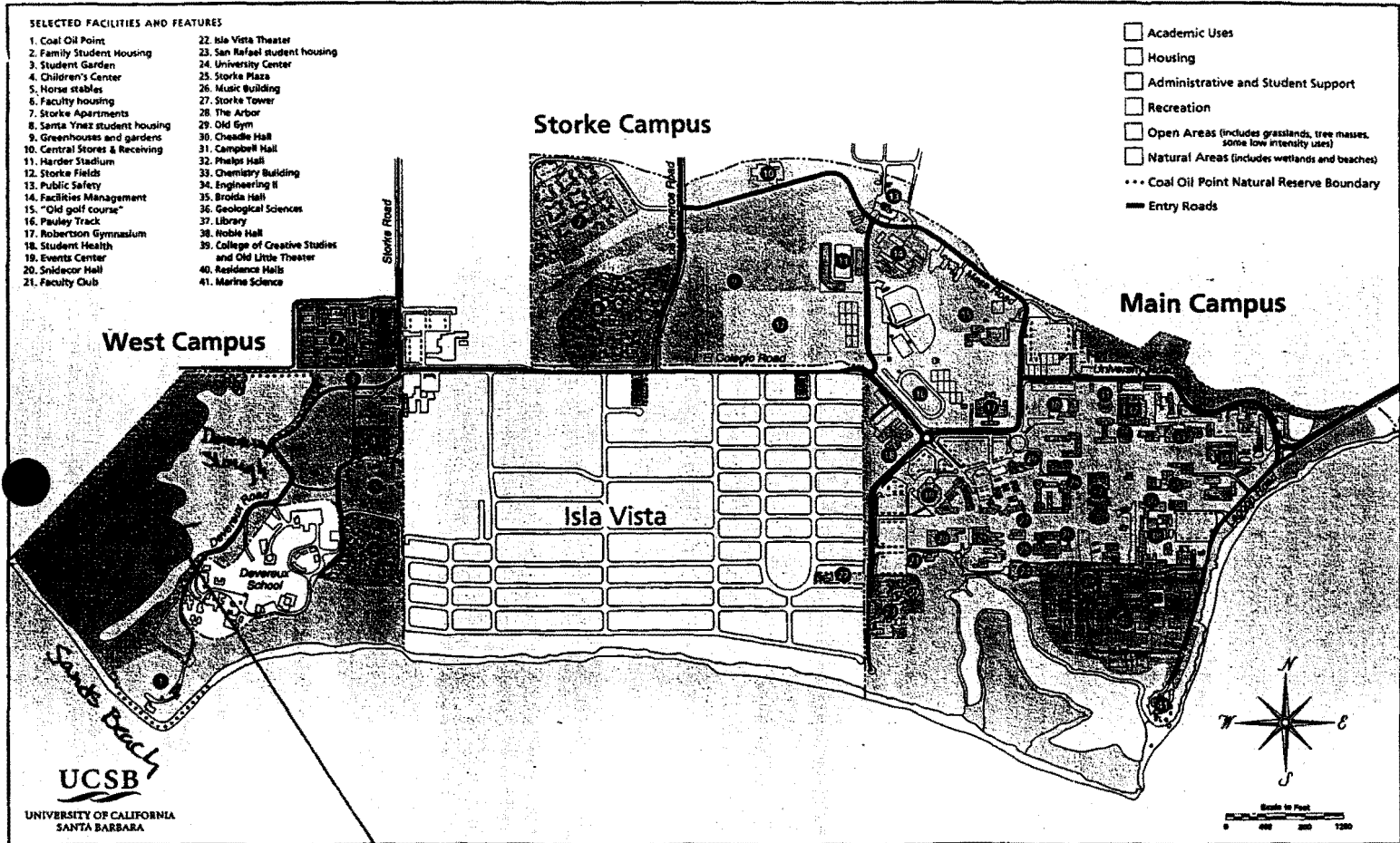
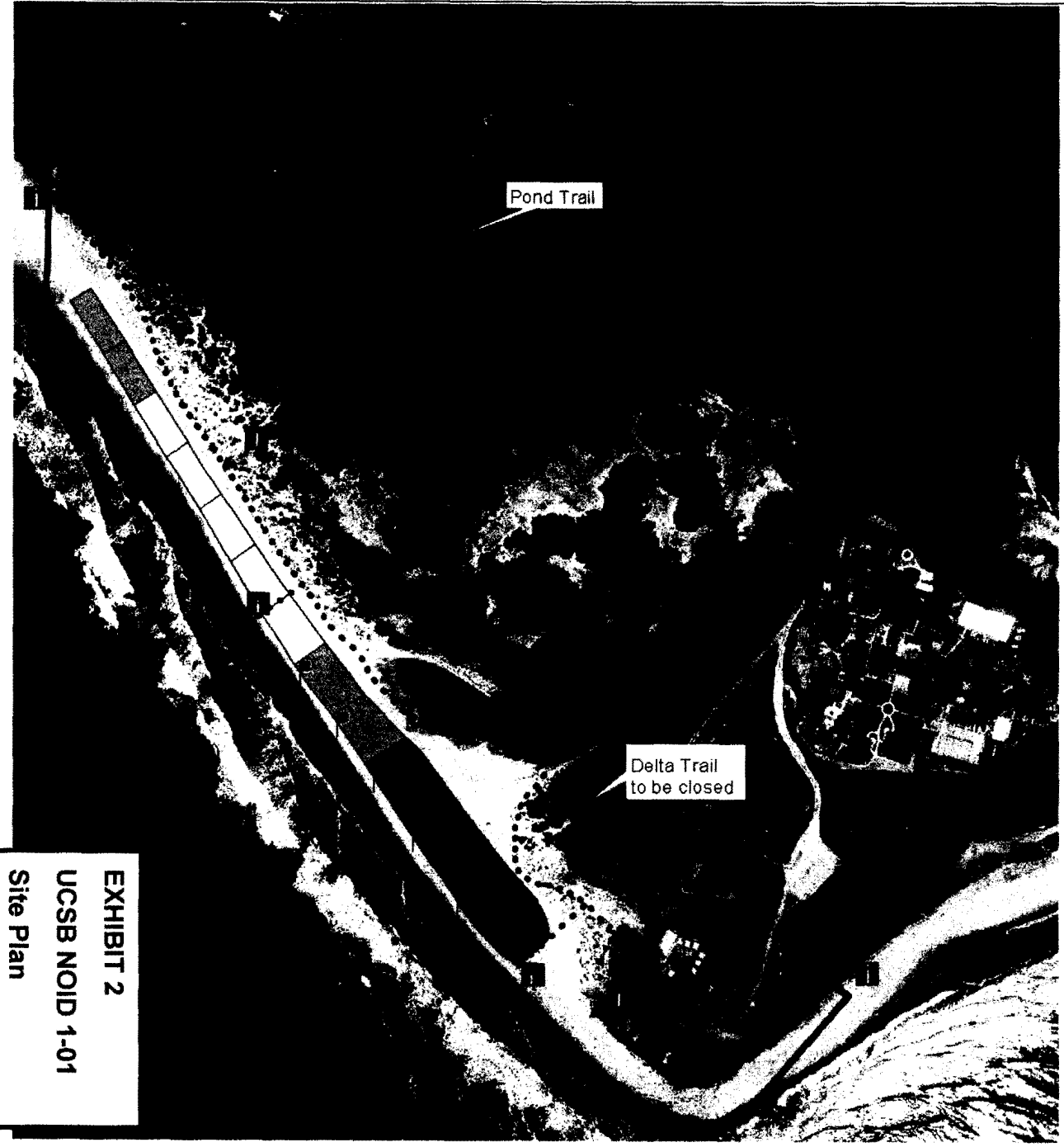








FIGURE 3 Existing Land Use 1.1.7 LRDP






EXHIBIT 2
 UCSB NOID 1-01
 Site Plan

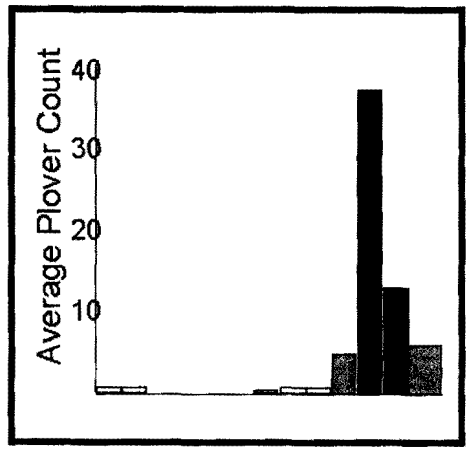


Additions and Improvements

-  "No trespassing" signs posted around roost
-  Educational signs
-  Dogs Must be on leash signs
-  "Please walk along corridor" sign.
-  Roost Fence
-  New Delta Trail Fence

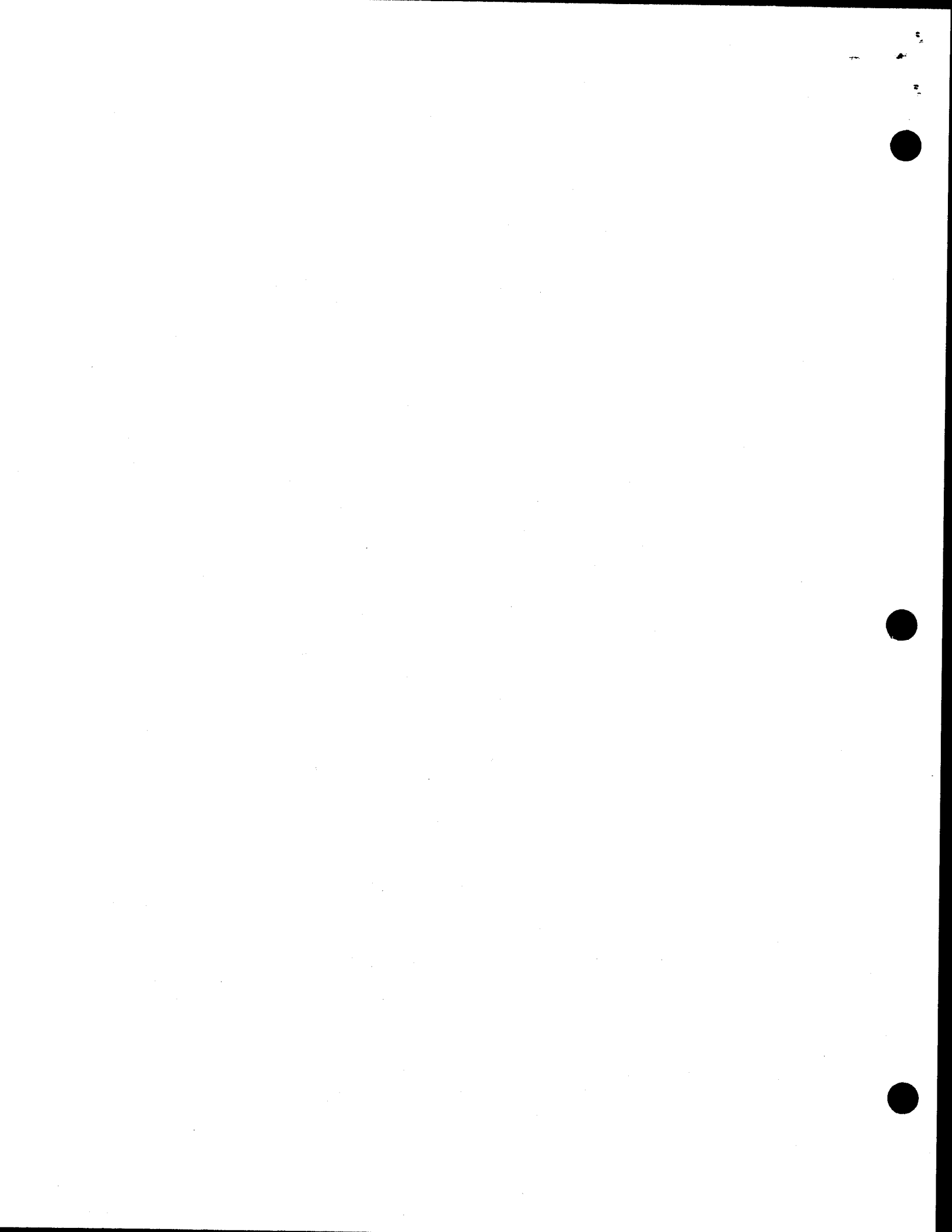
Existing Features

-  Beach Fence
-  Delta Trail
-  COPR Boundary



Coal Oil Point Reserve
 Management Plan, 2001
 University of California
 Santa Barbara
 UC Natural Reserve System





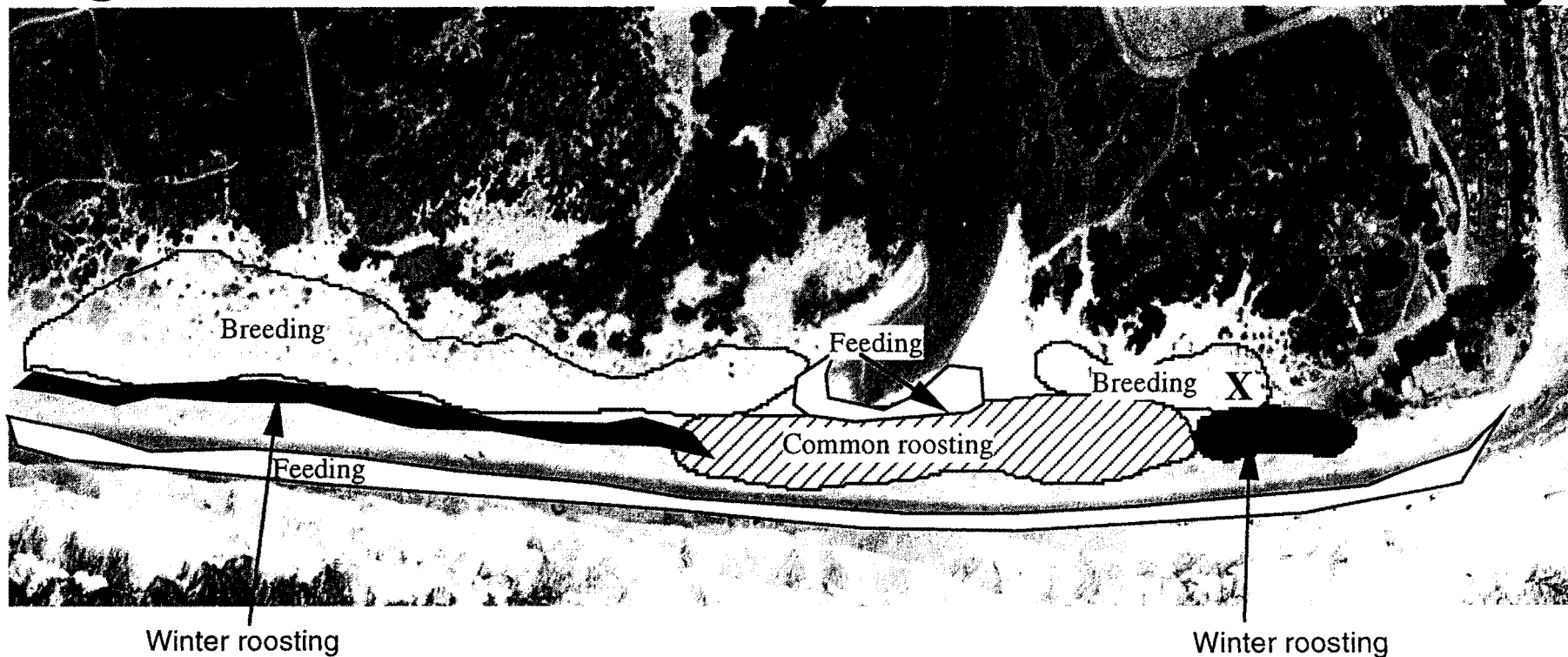


Figure 3a. Main habitats used by Snowy Plovers at Sand's beach, Coal Oil Point Reserve. Sections 1 to 6 D refer to dry sand and 1 to 6 W refer to wet sand.

Breeding: The foredunes are the most appropriate habitat for breeding as they include upper beach and bare dunes of small size. The X indicate the likely location of the nest in the Summer of 2001 from observation of a female exhibiting nesting behavior.

Roosting: Plovers roost in the dry sand (D). During the Spring, Summer and Fall, they are mostly concentrated in areas 2D, 3D, and 4D). During the Winter, Plovers will roost on 1D, 2D, 5D and 6D if the mouth of the slough is open or if the tide is very high because these areas have higher dunes.

Feeding: Plovers feed on the kelp rack zone between the dry sand and the wet sand and on the wet sand on zones 1 to 6, and around the mouth of the slough on 3D. Plovers feed on all sections early in the morning and late in the afternoon (probably to avoid people). The brood from 2001 fed in sections 2, 3 and 4 until the chick fledged.

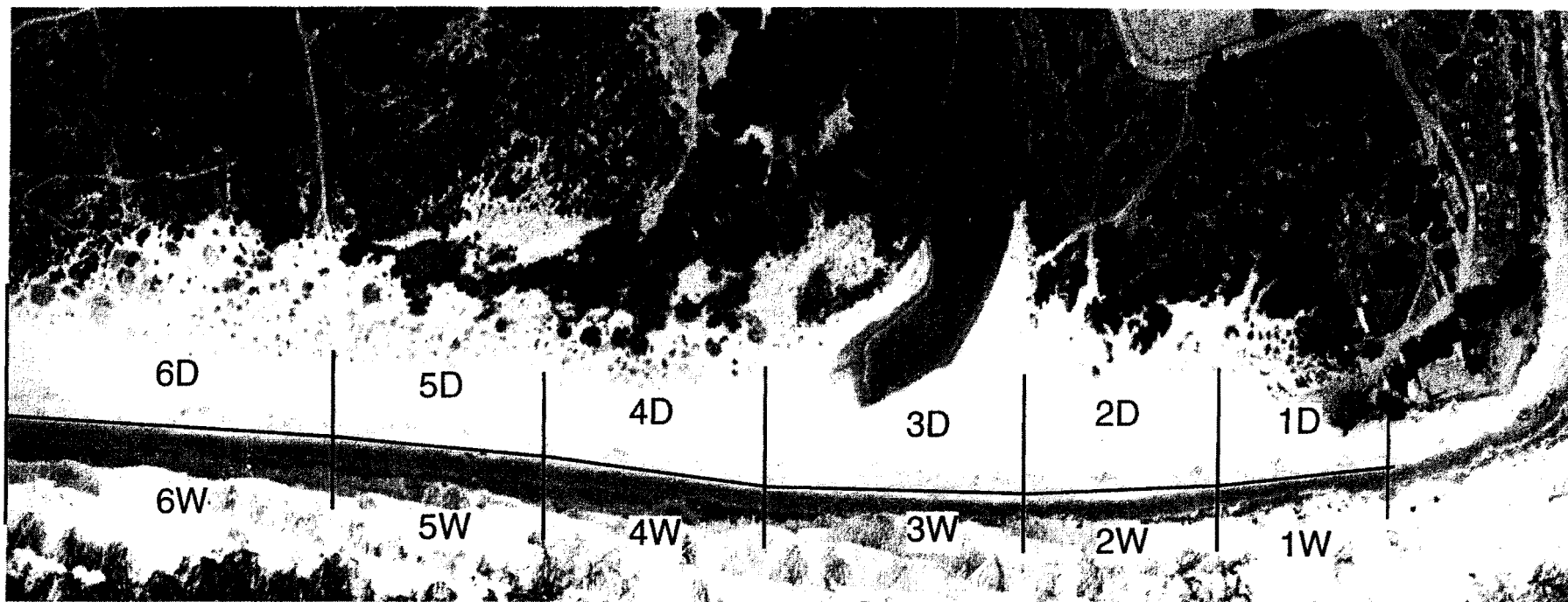
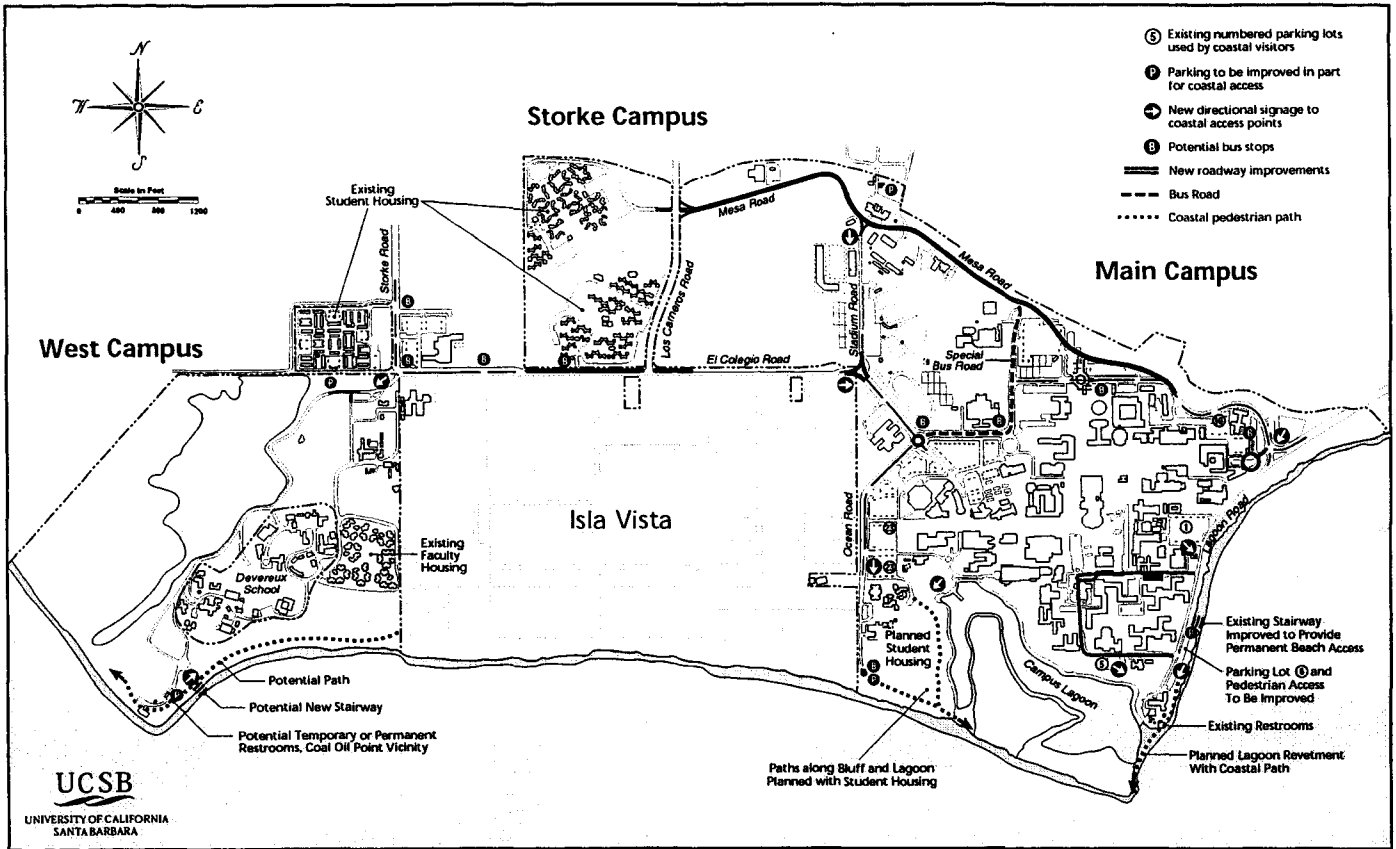


Figure 3b. Beach segments as referred in Figure 3a. The same beach segments are used to count people and plovers every week. D is dry sand and W is wet sand.

EXHIBIT 3b
UCSB NOID 1-01
Beach Segments



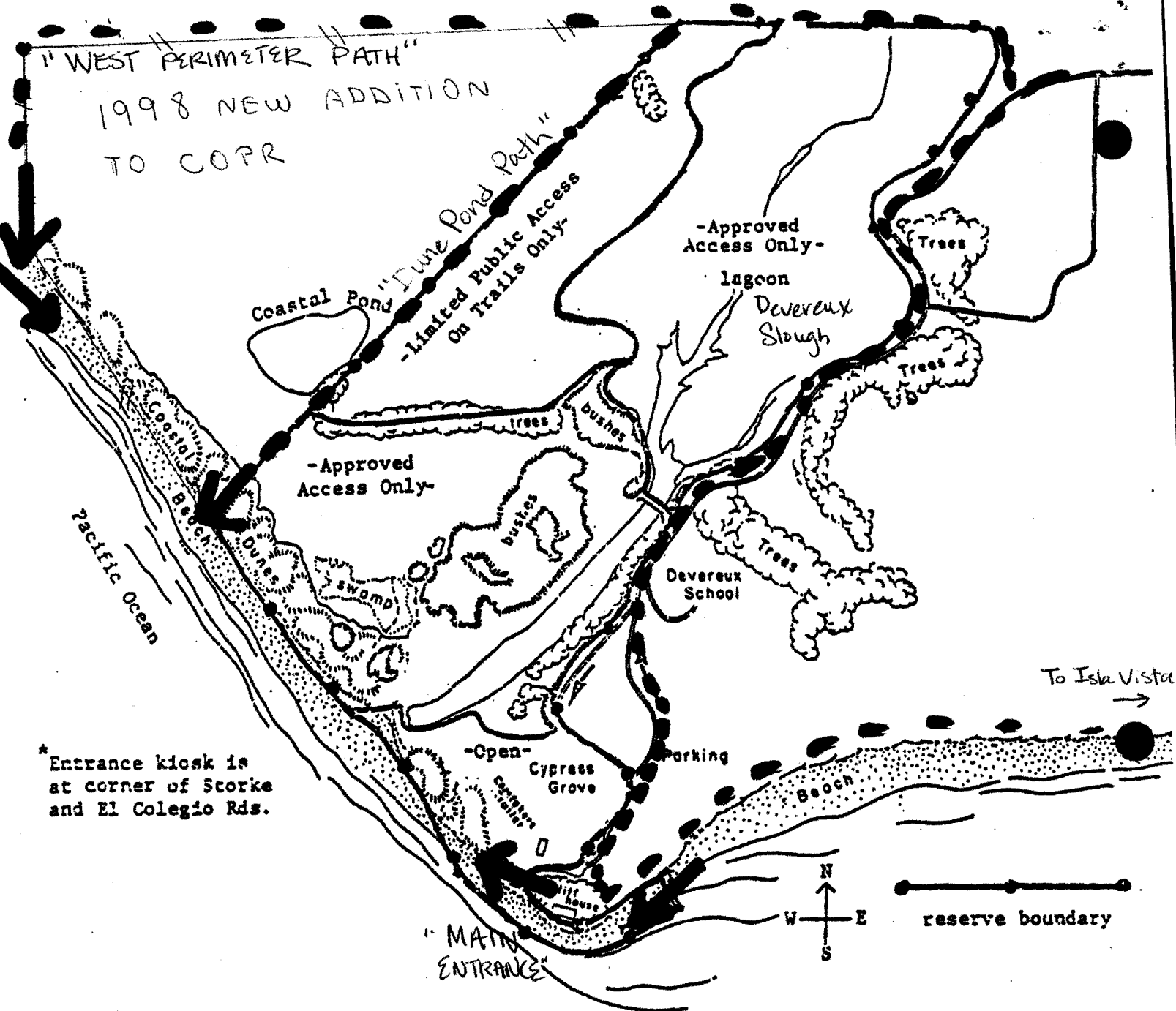
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UNIVERSITY OF CALIFORNIA
SANTA BARBARA

UPDATED DECEMBER 1994

FIGURE 27 Coastal Access Improvements

2.III.7
LRDP

EXHIBIT 4
UCSB NOID 1-01
LRDP Coastal Access



COAL OIL POINT RESERVE

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Figure 1. Proposed access plan for Coal Oil Point Reserve in 1984. Public access is basically the same today. However, several features have changed since then and a new access plan for Coal Oil Point Reserve is being proposed in the 2001 Coal Oil Point Draft Management Plan. For example, (1) the COPR now controls the 40 acres to the the Reserve and is planning on creating a nature trail within it, (2) the Cypress G. been restored with native vegetation, (3) the Snowy Plover became a threatened in 1993 and will need to be protected.

EXHIBIT 5
UCSB NOID 1-01
Existing Coastal Access at COPR

→ PRIMARY ACCESS POINTS

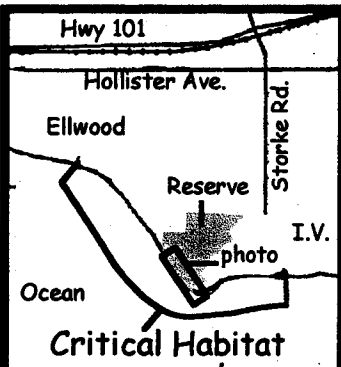
ENTERING SNOWY PLOVER CRITICAL HABITAT

Near extinction

The Pacific Coast Western Snowy Plover is Threatened. In 1999, the U.S. population was less than 1500 birds and declining.

Conservation

The US Fish and Wildlife Service designated critical habitat to reduce disturbance, habitat destruction, non-native plants in dunes and predation.



Rarely noticed

The tiny Snowy Plover's coloration blends with the dry sand. If you pass close by, they sit still or sneak quietly away.



Local treasure

10% of the remaining Snowy Plovers on our coast live at Coal Oil Point Reserve. They stopped nesting here due to disturbance.

Want to help?

Many groups are working to protect Snowy Plovers and allow recreation. Your awareness helps. To participate, call the Reserve at 893-4127.

Share the Beach

Walk along the surf when near the roost.
Stay 30 yards away from plovers.
Keep pets at home.
Respect rules prohibiting camping, fires, vehicles and litter.

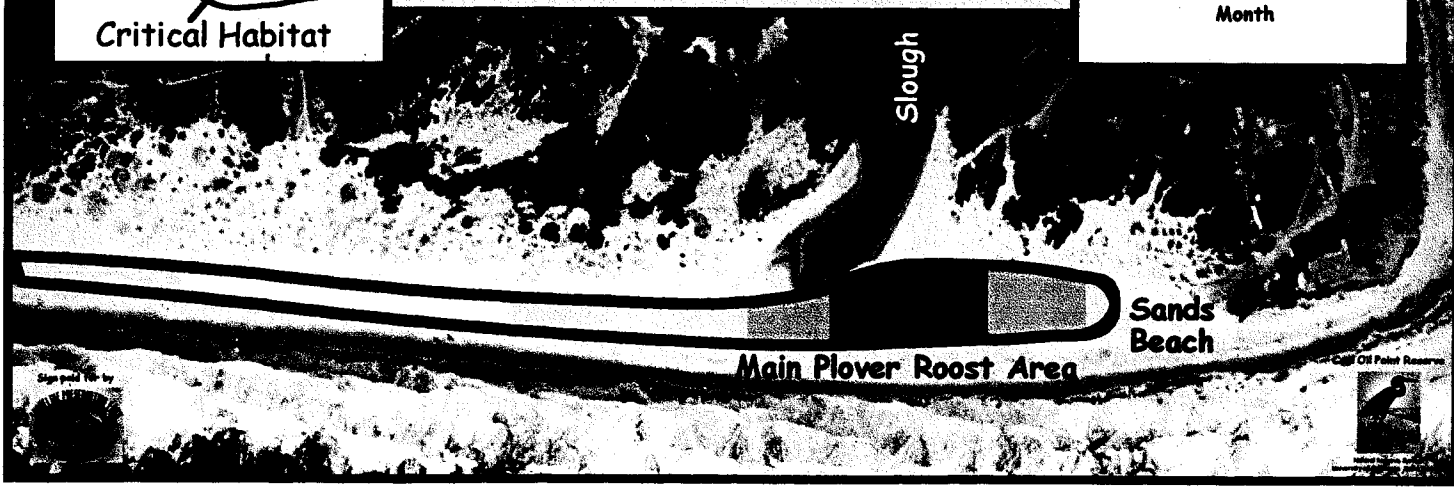
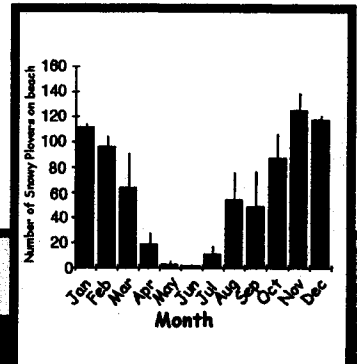
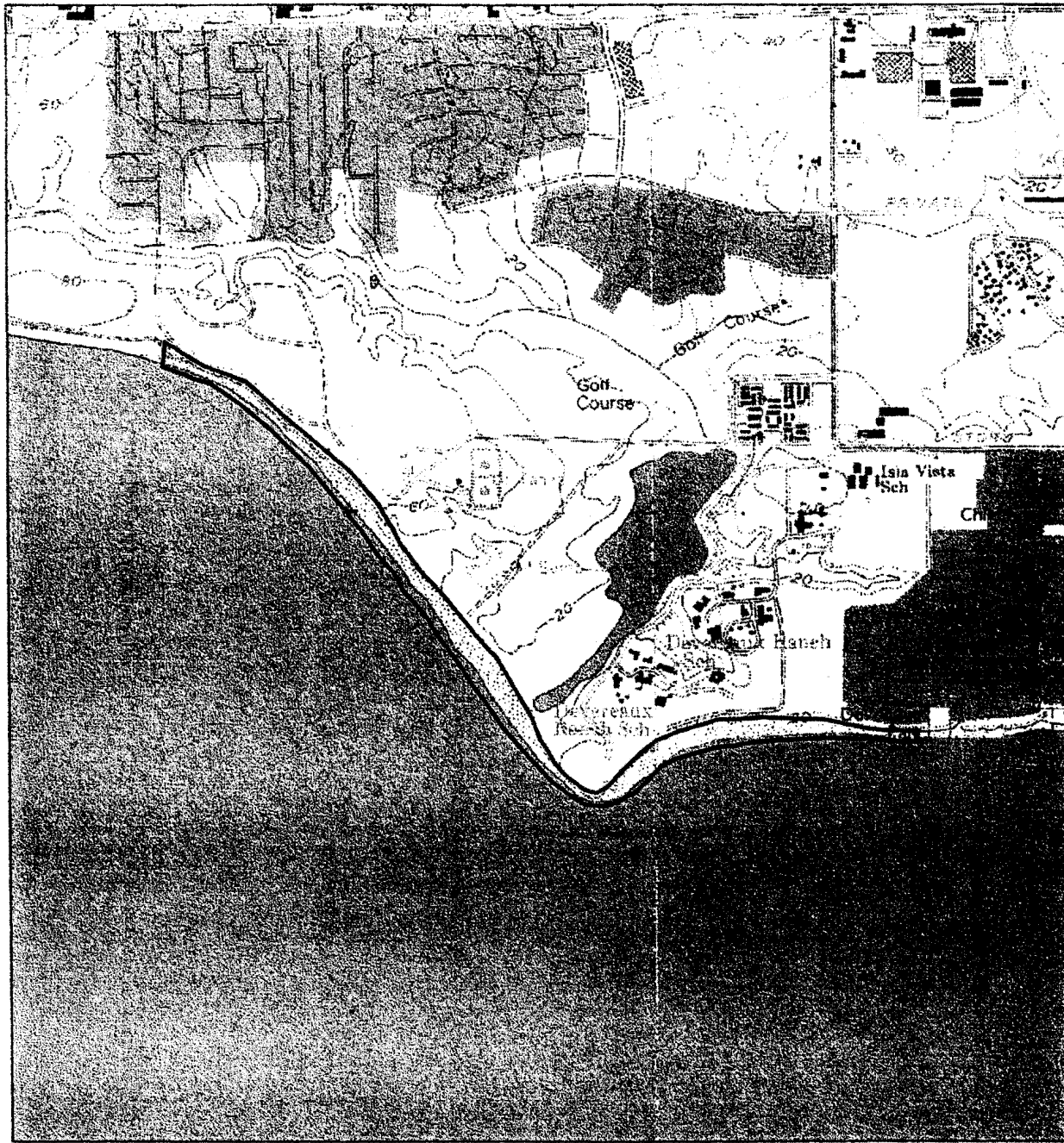


EXHIBIT 6
UCSB NOID 1-01
Snowy Plover
Interpretive Sign

Figure L-112. Devereaux Beach (CA-88)



0.2 0 0.2 0.4 Miles



0.2 0 0.2 0.4 Kilometers

