

CALIFORNIA COASTAL COMMISSION

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STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-01-139

APPLICANT: Marine Science Institute, Natural Reserve System, University of California, Santa Barbara

PROJECT LOCATION: University of California, Santa Barbara, West Campus – Coal Oil Point Reserve.

PROJECT DESCRIPTION: Implement a program to protect the western snowy plover, a federally listed threatened species. The proposed project 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. These measures are proposed in conjunction with the measures described under Notice of Impending Development 1-01 to protect the western snowy plover population at the Reserve.

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).

SUMMARY OF STAFF RECOMMENDATION

The project entails the implementation of measures to protect the population of federally threatened western snowy plovers at Devereux Slough. The closure of the roost area would provide for greater protection of the environmentally sensitive habitat while allowing continued access for appropriate uses. Staff recommends **approval** of the proposed project with four (4) Special Conditions addressing: (1) Project Inspection and Responsibilities; (2) Snowy Plover Monitoring Program; (3) Signage Program; and (4) Project Term (This condition will limit the permit to a two year period, renewable for one additional year, at the discretion of the Executive Director, for good cause.)

I. STAFF RECOMMENDATION

MOTION: *I move that the Commission approve Coastal Development Permit No. 4-01-139 pursuant to the staff recommendation.*

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date, in accordance with the overall permit term restrictions set forth in Special Condition 4.
3. **Interpretation.** Any questions of intent or interpretation of any term or condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. **Project Inspection and Responsibilities**

The applicant shall conduct a daily inspection of the fencing and signage on the beach throughout the life of the project. The applicant shall inspect all project fencing and signage to ensure that the equipment is intact, set at the correct height, and properly placed with no potential for any part of the project to be washed to the ocean. Based on observable wet-sand conditions and local tide charts, the applicant shall align the lowermost fence posts and accompanying beach signage *above* the daily higher high tide.

Prior to installation of fencing or signage, the applicant shall submit a list of person(s), for review and approval by the Executive Director, who are designated as responsible parties for conducting project inspections and adjusting the equipment. The list shall include the full name of the responsible party, an up-to-date phone number, and responsibilities as assigned. The applicant shall submit an updated inspector list on January 1st of each year of the project and as responsible parties are assigned or deleted.

2. **Sands Beach Monitoring Program**

Prior to the issuance of Coastal Development Permit 4-01-139, the applicant shall submit a project monitoring plan for the review and approval of the Executive Director. The plan shall be prepared by a qualified biologist and shall at a minimum include, but not be limited to, the following components: 1) Collection of data on plover abundance and use of the designated plover recovery study area, with a description of the plover survey methodology; 2) Documentation of all known incidents of plover disturbance including dates, times, and source of disturbance (pedestrians, dogs on or off leash, equestrians, predation, or vandalism of unknown origin); 3) Establishment and measurement of plover protection goals and outcomes; 4) Collection of data on public access and recreation activities adjacent to the designated plover recovery area, including pedestrian, pedestrian and dog, and equestrian use of the area.

Upon approval by the Executive Director, the plan shall be implemented and the qualified biologist shall annually thereafter submit a monitoring report detailing the information gathered pursuant to each of the four categories set forth above for the previous year.

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 showing the location, size, design, and content of all signs to be installed.

4. Project Term

Two years after installation of the fence authorized in CDP No. 4-01-139, the fence shall be removed, unless authorization under the Coastal Act has been granted for the fence to remain onsite. The Executive Director may give permission for the fence authorized in CDP 4-01-139 to remain onsite for one additional year, for good cause.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. Project Description and Background

The project site is located on the West Campus at University of California, Santa Barbara in the southern portion of Coal Oil Point Reserve along Sands Beach, at the mouth of Devereux Slough (Exhibits 1 and 2). Access to the Reserve is provided via a public road from the north entrance of the West Campus at the intersection of Storke and El Colegio Roads. The Reserve is approximately 157 acres and is located west of the Cliff House seminar facilities, Devereux School, and UCSB faculty housing. The area in direct proximity to the site is undeveloped with the exception of the Main Entrance gate and other facilities on the blufftop.

The proposed project entails the implementation of a snowy plover management program to protect the western snowy plover population at Coal Oil Point Reserve. The western snowy plover (*Charadrius alexandrinus nivosus*) is a federally listed threatened species by the U.S. Fish and Wildlife Service (USFWS). The proposed project 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) in length restricted roost area near the mouth of the slough; (2) installation of "no trespassing" signs around the roost; and (3) installation of signs on either side of the roost fence indicating that the area is snowy plover habitat and directing visitors to bypass the area by utilizing the available wet sand corridor. These measures are proposed in conjunction with the measures described under Notice of Impending Development 1-01 to protect the western snowy plover population at the Reserve (see Section B, below).

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. However, Devereux Slough and the slough mouth lie within the retained jurisdiction of the Coastal Commission. The proposed restricted roost area lies at the slough mouth and requires a coastal development permit from the Commission.

The existing habitats in the project vicinity include dune swale habitat, foredune habitat, slough margin, active slough, and sandy beach. Although the project site is not specifically designated as environmentally sensitive habitat by the LRDP, the area provides habitat for 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 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 and survivorship. 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.

Under this Coastal Development Permit application, the applicant proposes to delineate the main roost area with vertical cable fencing that spans from the upper beach at the base of the foredunes to a location above the higher high tideline. The two fences would be placed 400 meters apart, with the slough mouth approximately at the center, to delineate the main roost area where pedestrians and their pets should not enter (Exhibit 2). After demarking this roost area which harbors the main concentration of plovers, "no trespassing" signs would be placed parallel to the beach in line with the shoreline terminus of the vertical fencing. In addition, two signs would be placed at the corners of the fencing stating that the area is snowy plover habitat and to please keep moving within the wet sand / beach corridor. Additional "no trespassing" signs would be placed along the cable fencing approximately 10-15 meters (33-49 feet) apart. The installation of "no trespassing" signs would allow the police department to enforce the restricted area and issue citations when necessary. The height of all signage and fencing would vary depending upon the natural deposition or erosion of sand at the base; however, the signage and fencing would be adjusted to approximately 2½ feet above ground level (AGL), with a maximum of 3 feet AGL.

The beach cable fence would be constructed with plastic posts and rope. A hole on the top of each post will allow a plastic covered cable ¼" inch thick to pass through. An anchor post would be placed at the highest end of each cable to allow retrieval of the posts and cable in the event that an unexpected, very high tide removes the lower end. The remaining posts would be pounded in the ground manually with a post driver. It is important that these posts be easy to remove. They will need to be adjusted with the extent of the tides.

Since the tide is dynamic by nature, the applicant proposes to manually shift the location of the cable fencing and sign posts as necessary to align them above the higher high tideline. By aligning them in this manner, public access would be maintained at all times, along the wet sand area. To ensure that this accessway is available, the applicant would remove or add fencing to a location above the anticipated higher high tide. Due to the relative predictability of the summer beach profile, the Reserve anticipates placing the fencing above the highest high tideline so that a wet sand corridor is maintained without having to relocate the lower portion of the fence during the summer season. However, during other times of the year, particularly in winter when the beach profile can change significantly, the Reserve anticipates moving the fence up a day before a very high tide, at least weekly. Though the Reserve foresees, at most, weekly relocation of the lower fence during some times of the year, staff would inspect the facilities daily to ensure that the wet sand corridor is maintained and that facilities are intact and not likely to wash to the ocean.

The proposed project is consistent with measures described by the USFWS (2001) as "symbolic fencing." Symbolic fencing identifies area of restricted use and relies heavily upon the voluntary compliance of visitors. UCSB police have authority in the area and have recently increased patrol of the Reserve, and subsequently, the enforcement of applicable regulations. The police would respond to any incidents in the restricted area and enforce trespassing and dog leashing regulations, through citations when necessary. The applicant has not proposed any additional enforcement to implement the management program. Consistent with its primary function, the Reserve depends largely upon education of the public.

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. In order to alert the public to the presence and significance of the snowy plover at Devereux Slough, two interpretive signs were placed in existing kiosks at the Reserve in Fall 2000 (see Exhibit 6). 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.

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.

In addition to fulfilling the mission of the NRS and complying with the policies of the Coastal Act, 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 C(1) for details on the Regulatory Background) has led the applicant to 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' overall ability to rest and feed which ultimately effects their ability to build up fat reserves for reproduction. 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.

B. Overall Snowy Plover Management Program

The above mentioned project is proposed in conjunction with the measures described under Notice of Impending Development (NOID) 1-01 as part of an overall program to protect the western snowy plover habitat at the Reserve. The impending development pursuant to NOID 1-01 consists of the closure and restoration of a 190-meter 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). 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.

C. Environmentally Sensitive Habitat Area

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states that:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30240 states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Sections 30230 and 30231 of the Coastal Act require that the biological productivity and the quality of coastal waters and streams be maintained and, where feasible, restored through among other means, minimizing adverse effects of waste water discharge and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flows, maintaining natural buffer areas that protect riparian habitats, and minimizing alteration of natural streams. In addition, Section 30240 of the Coastal Act states that environmentally sensitive habitat areas must be protected against disruption of habitat values.

As described above, the proposed project includes a coordinated set of measures that will serve to protect the western snowy plover population at Coal Oil Point Reserve. Specifically, the proposed project 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) in length restricted roost area near the mouth of the slough; (2) installation of "no trespassing" signs around the roost; and (3) installation of signs on either side of the roost fence indicating that the area is snowy plover habitat and directing visitors to bypass the area by utilizing the available wet sand corridor.

The measures proposed to be implemented pursuant to this coastal development permit 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 habitats in the project vicinity include dune swale habitat, foredune habitat, slough margin, active slough, and sandy beach. Although the project site is not specifically designated as environmentally sensitive habitat, the area provides habitat for 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 (including 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 2), are concentrated in the dry sand at the mouth of the slough. As illustrated in Exhibit 3, 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 (supporting 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 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 on Sands Beach where pedestrians and their pets are prohibited.

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 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 importance of protecting wintering birds is underscored by the fact that breeding birds on protected beaches are suffering reduced egg number and chick survival. These symptoms may suggest that birds have not fed satisfactorily at their wintering grounds. A major cause of insufficient feeding is constant disturbance that force the birds to spend energy and prevent them from feeding on the ground.

The protection measures proposed to be implemented, pursuant to Coastal Development Permit Application 4-01-139 and Notice of Impending Development 1-01, to protect snow plovers consists of three main efforts: (1) providing a protected 400-meter roost area; (2) closing, restoring, and fencing off the Delta Path; and (3) installing regulatory and educational signage. The applicant further intends to monitor the effectiveness of these actions, though a monitoring program and survey methodology have not been submitted to Commission staff.

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 have observed federally endangered least tern within the area as nursing grounds for their recently fledged chicks. (Sandoval, pers. comm.)

Proposed Measures NOID 1-01

Under Notice of Impending Development 1-01, the applicant 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. The Delta Trail channels users to the slough mouth which serves as a common roost area for the snowy plover. 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 to deter pedestrians and equestrians from creating new paths to the Delta Path and mouth of the slough.

These measures are more specifically addressed under the concurrent Notice of Impending Development (NOID 1-01) before the Commission.

Proposed Measures CDP 4-01-139

As proposed under this coastal development permit application, the primary means of protecting the snowy plover population at the Reserve is through delineating a 400 meter restricted use area around the main roost. This entails the placement of vertical cable fencing along the upper beach, at the base of the foredunes extending to a location above the higher high tide. The two fences would be placed 400 meters apart, with the slough mouth approximately at the center, to delineate the main roost area where pedestrians and their pets should not enter (Exhibit 2). After demarking this roost area which harbors the main concentration of plovers, "no trespassing" signs would be placed parallel to the beach in line with the shoreline terminus of the vertical fencing (Exhibit 2). Signage would also be placed on either side of the fencing to alert the public to the applicable restrictions. The height of all signage and fencing would vary depending upon the natural deposition or erosion of sand at the base; however, the signage and fencing would be adjusted to approximately 2½ feet above ground level (AGL), with a maximum of 3 feet AGL.

Since the tideline is dynamic by nature, the applicant proposes to manually shift the location of the cable fencing and sign posts as necessary to align them above the higher high tideline. By aligning them in this manner, public access would be maintained at all times, along the wet sand area. To ensure that this accessway is available, the applicant would remove or add fencing to a location above the anticipated higher high tide. As a result, the length of the cable fencing would vary over the course of the year, roughly corresponding to the available dry sand area. Though much of the variation in beach width is a function of tidal height, beach width is also affected by seasonal variation in the distribution of sand, with sand beach width much narrower in the winter and early spring. Based on beach profile data compiled by the Reserve in 1999, the average Sands Beach profile ranges from approximately 105 meters of dry sand in the summer to approximately 35 meters of dry sand in winter. In practice the west fence will be shorter than the fence east of the slough due to difference in the beach profile characteristics.

Due to the relative predictability of the summer beach profile, the Reserve anticipates placing the fencing above the highest high tideline so that a wet sand corridor is maintained without having to relocate the lower portion of the fence during the summer season. However, during other times of the year, particularly in winter when the beach profile can change significantly, the Reserve anticipates moving the fence up a day before a very high tide, at least weekly. Though the Reserve foresees, at most, weekly relocation of the lower fence during some times of the year, staff would inspect the facilities daily to ensure that the wet sand corridor is maintained and that facilities are intact and not likely to wash to the ocean. To ensure that the cable roost fence is maintained properly and does not impede public access along the wet sand at any time, **Special Condition One (1)** requires daily inspection of the fencing and signage on the beach for the life of the project. Special Condition 1 requires the signage and fencing along the shoreline to be above the higher high tide. Additionally, Special Condition 1 requires the Reserve to maintain an updated list, subject to review and approval by the

Executive Director, of all parties that are authorized to inspect and adjust the fencing and signage.

The proposed project is intended to enhance habitat for the federally-threatened western snowy plover by reducing human-related disturbance. The applicant has indicated that the project would be monitored to ensure the effectiveness of the protection measures. However, the applicant has not submitted a monitoring program or methodology to Commission staff.

To ensure that this project is successful and adequately protects the target plover habitat, **Special Condition Two (2)** requires the applicant to submit a project monitoring plan prepared by a qualified biologist or resource specialist which provides specific goals, and performance standards to evaluate if the project efforts are effective. In addition, the monitoring program shall assess the recreational activities along Sands Beach, west of Coal Oil Point. The monitoring plan shall specify the snowy plover survey methodology, which shall be designed to monitor plover abundance, activity and disturbance.

In addition, Special Condition 2 requires the applicant to submit an annual monitoring report, beginning one year after the installation of the fencing and signage, prepared by a qualified resource specialist, for the review and approval of the Executive Director, evaluating the snowy plover protection project. The monitoring plan shall incorporate the collection of data on access and recreation in the Sands Beach area, including but not limited to the types, intensity, and distribution of recreation.

The Commission finds that the proposed protection measures strive to balance the management of sensitive resources with continued public access to the coast. The Commission further finds that the proposed protection measures are experimental in nature. The program is intended to maximize protection of plover habitat while maintaining continued use of, and access to, the surrounding stretches of beach for recreational uses. However, actual implementation of the program is subject to much uncertainty. A variety of external elements will influence the successful balance of resources and access which cannot be predicted or controlled, such as severe weather patterns, impacts to distant breeding grounds, regional impacts to the plover population, criminal damage or intentional harassment of plovers. As such, the Commission recognizes that an adaptive management approach is appropriate under these circumstances. Therefore the Commission imposes **Special Condition Four (4)** which outlines a two-year period of operation from the date of installation of the fence. This is intended to allow the applicant to gather enough data to provide an assessment of the project and determine whether the proposed project should be continued, modified, or removed. Special Condition 4 allows for a one-year extension of operations if the Executive Director determines that no adverse effects have resulted from this program and that there is good cause to continue it. Furthermore, Special Condition 4 requires the applicant to remove the structure(s) after two years of operation, or three years if allowed by the Executive Director, unless authorization under the Coastal Act has been granted to retain the structures onsite.

The proposed project includes the placement of signage on the site to inform the public about the restricted nature of the fenced area. Two signs would be placed at the corners of the fencing stating that the area is snowy plover habitat and to please keep moving within the wet sand / beach corridor. Formal "no trespassing" signs would be placed along the cable fencing approximately 10-15 meters (33-49 feet) apart to comply with the UCSB Police Department's guidance that the signs must be visible from all locations that a person might enter. A majority of the signs would be along the cable fencing, and therefore the number of signs would depend on the corresponding changes in beach width. The installation of "no trespassing" signs would allow the police department to enforce the restricted area and issue citations when necessary.

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. However, in this case, final information regarding the location, size, design, and language to be used has not been submitted as part of this application. 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 Applicant submit, for the review and approval of the Executive Director, plans adequate to show the location, design, and language to be used for all signs to be installed.

For the reasons cited above, the Commission finds that the proposed project as conditioned is consistent with Sections 30230, 30231, and 30240 of the Coastal Act.

D. Public Access

Section 30210 of the Coastal Act states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource area from overuse.

Section 30214 elaborates on access management considerations, providing, in relevant part, that:

(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

...

(2) The capacity of the site to sustain use and at what level of intensity.

(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area....

In order to protect the western snowy plover population at Coal Oil Point Reserve, the Reserve proposes to delineate the plover roost area with a cable, supported by thin posts, along the eastern and western limits of the plover roost, creating a 400-meter (1,312-foot) in length restricted roost area along Sands Beach near the mouth of Devereux Slough. To delineate the roost area, two cables will run, perpendicular to the shore, from the vegetated margin of the dunes to a location above the higher high tideline. The project will include educational and regulatory signage to direct visitors around the restricted roost area.

As stated previously, concerns over the potential "take" of species under Section 9 of the ESA (see Section C(1)) has led the Natural Reserve System 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 ½ of COPR 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.

The access policies of the Coastal Act 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 stated above, approximately half of the Reserve 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.

The Commission-certified 1990 Long Range Development Plan (LRDP) for U.C. Santa Barbara 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 project. Therefore the Commission finds that adequate access to the beach is maintained in the area.

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. A beach survey of 100 users showed that approximately 70% of visitors are students from UCSB and the remaining 30% are primarily members of the local community.

Studies conducted at Sands Beach identify several types of beach uses by visitors, including walking, jogging, sunbathing, surfing, watching the sunset, attending parties, cleaning up the beach, walking dogs, birdwatching, painting, and riding horses. Dogs are prohibited in the portion of the Reserve closed to the general public and are subject to the Santa Barbara County leash laws in the areas open to the public. Research at the Reserve has indicated that on average, approximately 7% of dogs were leashed in the 850 meters of Critical Habitat area at Sands Beach, as required, and approximately 21% of pets were leashed in the 400-meter main plover roost in accordance with existing leash laws (Lafferty 2001b). The UCSB Police have recently increased patrol of the area to more actively enforce the trespass and pet leash laws.

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 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 University's Long Range Development Plan does not address equestrian use of the Reserve.

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 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) indicates 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.

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 on Sands Beach where pedestrians and their pets are prohibited.

As proposed under this coastal development permit application, the primary means of protecting the snowy plover population at the Reserve is through delineating a 400 meter restricted use area around the main roost. This entails the placement of vertical cable fencing along the upper beach, at the base of the foredunes extending to a location above the higher high tide. The two fences would be placed 400 meters apart, with the slough mouth approximately at the center, to delineate the main roost area where pedestrians and their pets should not enter (Exhibit 2). After demarking this roost area which harbors the main concentration of plovers, "no trespassing" signs would be placed parallel to the beach in line with the shoreline terminus of the vertical fencing. Signage would also be placed on either side of the fencing to alert the public to the applicable restrictions. The height of all signage and fencing would vary depending upon the natural deposition or erosion of sand at the base; however, the signage and fencing would be adjusted to approximately 2½ feet above ground level (AGL), with a maximum of 3 feet AGL.

Section 30210 and 30214 policies of the Coastal Act 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 requires special management consideration and protection. Present use of the area has been determined to contribute a chronic stream of human-induced disturbance to the plovers which may ultimately impact reproduction and survivorship.

The public access policies of the Coastal Act allow for the manner of public access to be managed, as appropriate, in cases where fragile natural resources are impacted. Under the proposed project, a portion of the existing beach would be restricted from recreational uses. However, the proposed protection measures strive to balance the management of sensitive resources with continued public access to the coast. Though access and recreation would be prohibited in the protected stretch of beach, the protected area represents a small portion of the total available beach in the area available for recreational use. Furthermore, the protected area represents less than half of the designated snowy plover critical habitat. As proposed, the project would maintain access to the beach and sustain linear access around the protected area. The adjacent stretches of beach would remain available for recreational use year around. Therefore, the Commission finds that access and use restrictions are appropriate given the natural resource and access constraints at the site.

Use of the ¼-mile roost area would be restricted; however, pedestrian and equestrian traffic would be facilitated around the protected area, by passing along the wet sand parallel to the protected area. Since the tideline is dynamic by nature, the applicant proposes to manually shift the location of the cable fencing and sign posts as

necessary to align them above the higher high tideline. By aligning them in this manner, public access would be maintained at all times, along the wet sand area. However, access would be naturally inhibited when the delta at the mouth of the slough is breached, typically during a couple of storm events each year. To ensure that this accessway is available, the applicant would remove or add fencing to a location above the anticipated higher high tide. As a result, the length of the cable fencing would vary over the course of the year, roughly corresponding to the available dry sand area. Though the variation in beach width is often a function of tidal height, beach width is also affected by seasonal variation in the distribution of sand, with a much narrower beach in the winter and early spring. Based on beach profile data compiled by the Reserve in 1999, the average Sands Beach profile ranges from approximately 105 meters of dry sand in the summer to approximately 35 meters of dry sand in winter.

Due to the relative predictability of the summer beach profile, the Reserve anticipates placing the fencing above the highest high tideline so that a wet sand access corridor is maintained without having to relocate the lower portion of the fence at any time during the summer season. However, during other times of the year, particularly in winter when the beach profile can change significantly, the Reserve anticipates moving the fence up a day before a very high tide, at least weekly. Though the Reserve foresees, at most, weekly relocation of the lower fence during some times of the year, staff would inspect the facilities daily to ensure that the wet sand corridor is maintained and that facilities are intact and not likely to wash to the ocean. The Commission finds that there are potential adverse effects to public access if the program is not carried out in the manner that it is proposed. To ensure that the cable roost fence is maintained properly and does not impede public access along the wet sand at any time, **Special Condition One (1)** requires daily inspection of the fencing and signage on the beach for the life of the project. Special Condition 1 requires the signage and fencing along the shoreline to be above the higher high tide. Additionally, Special Condition 1 requires the Reserve to maintain an updated list, subject to review and approval by the Executive Director, of all parties that are authorized to inspect and adjust the fencing and signage.

The proposed project includes the placement of signage on the site to inform the public about the protected area and direct visitors around the main roost. Two signs would be placed at the corners of the fencing stating that the area is snowy plover habitat and to please keep moving within the wet sand / beach corridor. Formal "no trespassing" signs would be placed parallel to the beach in line with the shoreline terminus of the vertical fencing. In addition, "no trespassing" signs would be placed along the cable fencing approximately 10-15 meters (33-49 feet) apart to comply with the UCSB Police Department's guidance that the signs must be visible from all locations that a person might enter. A majority of the signs would be along the cable fencing, and therefore the number of signs would depend on the corresponding changes in beach width. The installation of "no trespassing" signs would allow the police department to enforce the restricted area and issue citations when necessary.

The Commission finds that adequate noticing of the restricted area is essential to protect environmentally sensitive resources and to inform the public of appropriate use and access. 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. However, in this case, final information regarding the location, size, design, and language to be used has not been submitted as part of this application. 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 Applicant submit, for the review and approval of the Executive Director, plans adequate to show the location, design, and language to be used for all signs to be installed.

As proposed, the Commission finds that the closure of the roost area would provide for greater protection of the environmentally sensitive habitat while allowing continued access for appropriate uses. Therefore, the Commission finds that the proposed project as conditioned is consistent with public access policies of the Coastal Act.



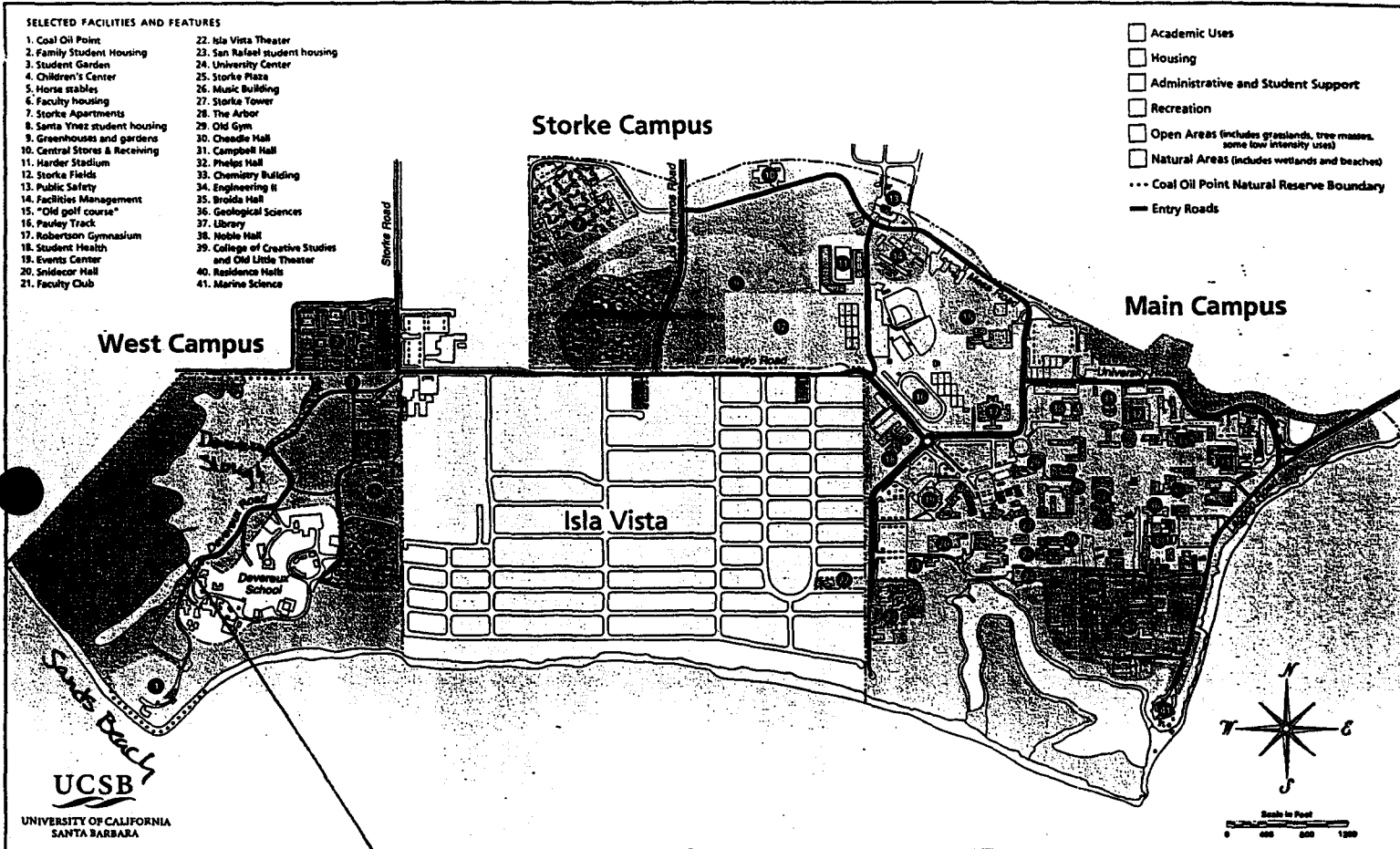
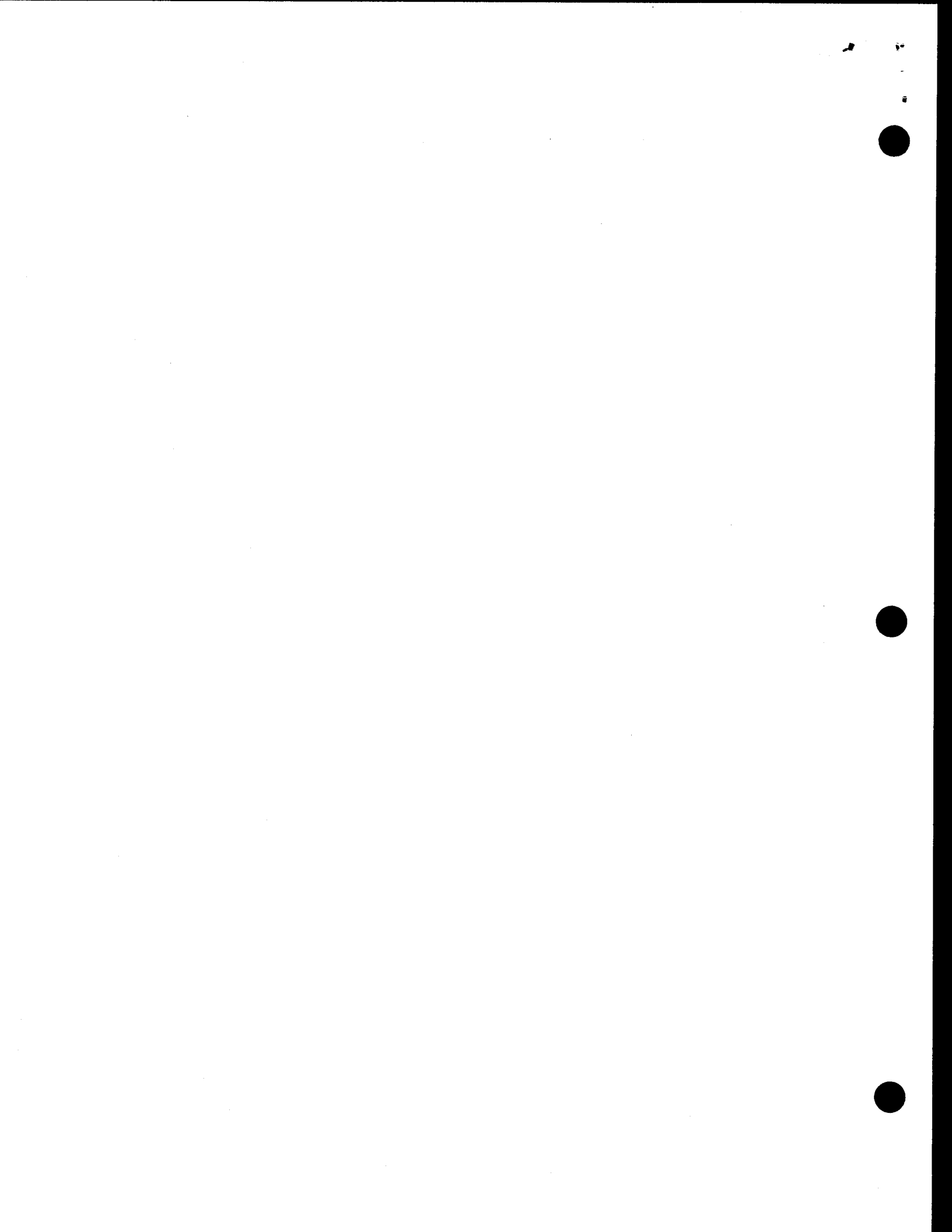


FIGURE 3 Existing Land Use 1.1.7 LADP

Coal Oil Point Reserve














Pond Trail

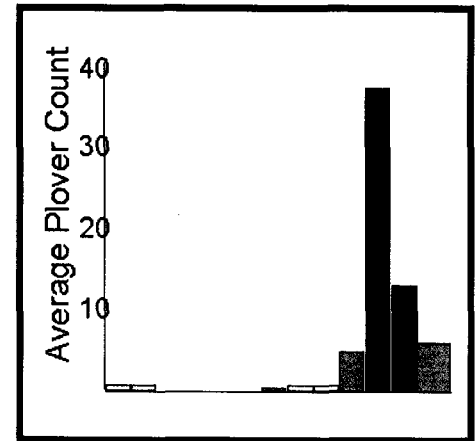
EXHIBIT 2
4-01-139
Site Plan

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

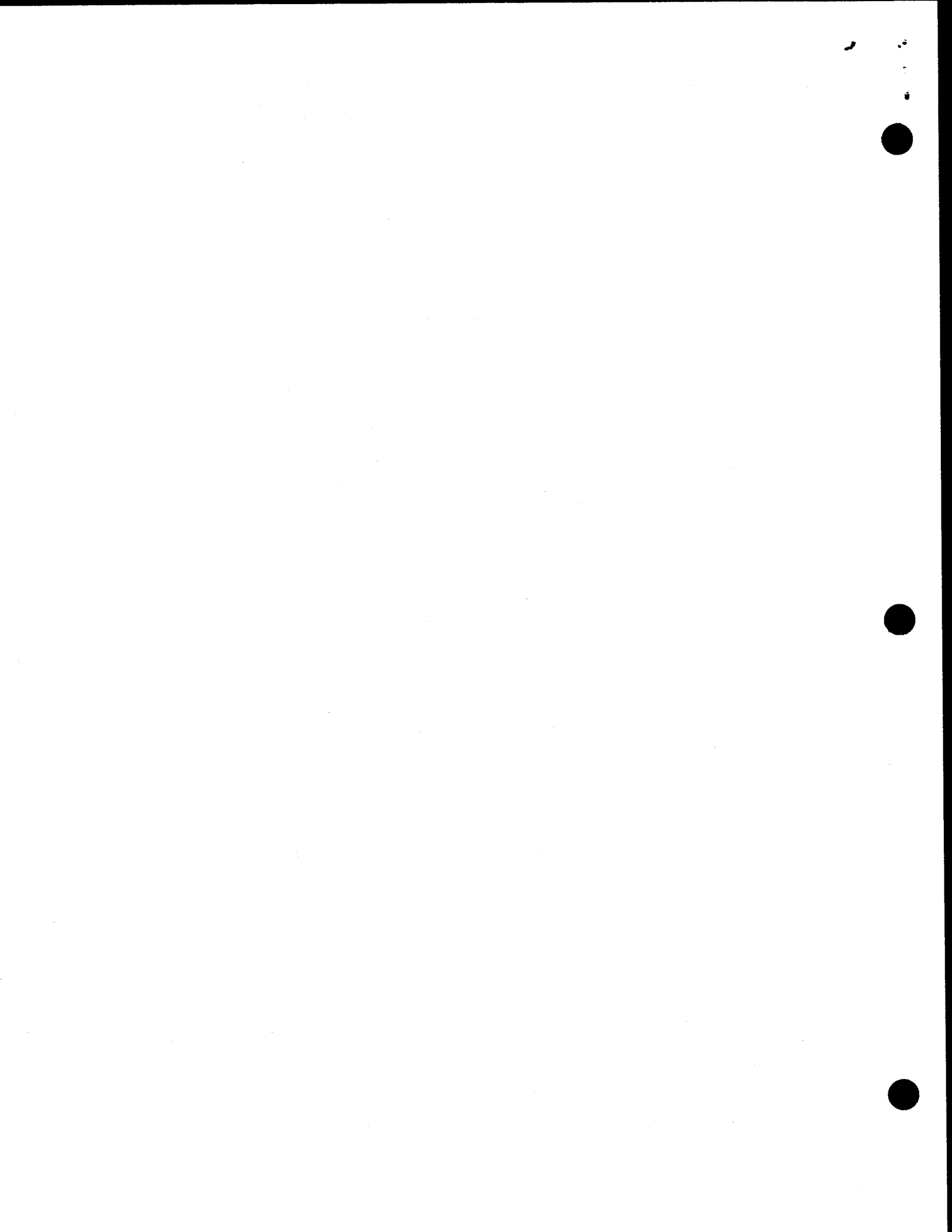
Existing Features

-  Beach Fence
-  Delta Trail
-  COPR Boundary



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





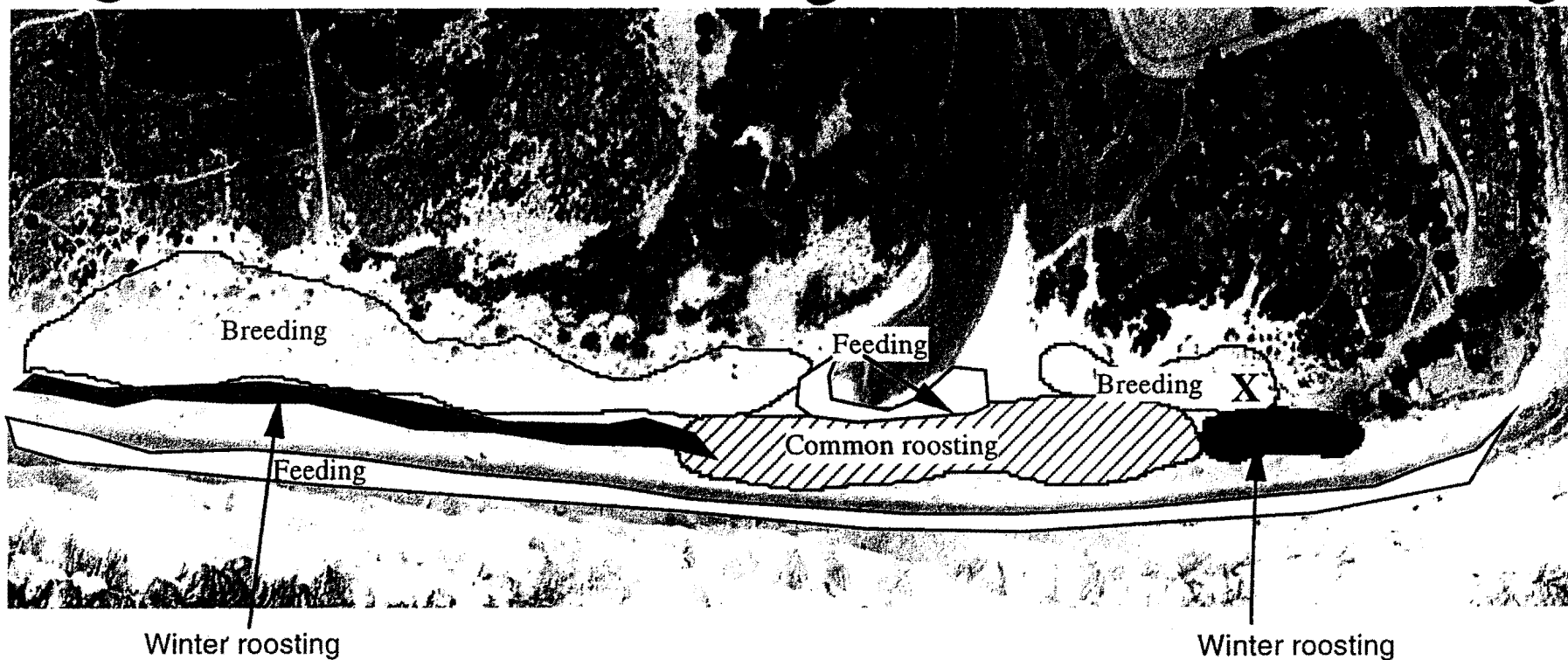


Figure 3a. Main habitats used by Snowy Plovers at Sand's beach, Coal Oil Point Reserve. Sections 1 to 6 D refer to dry sand and 1 to 6 W refer to wet sand.

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.

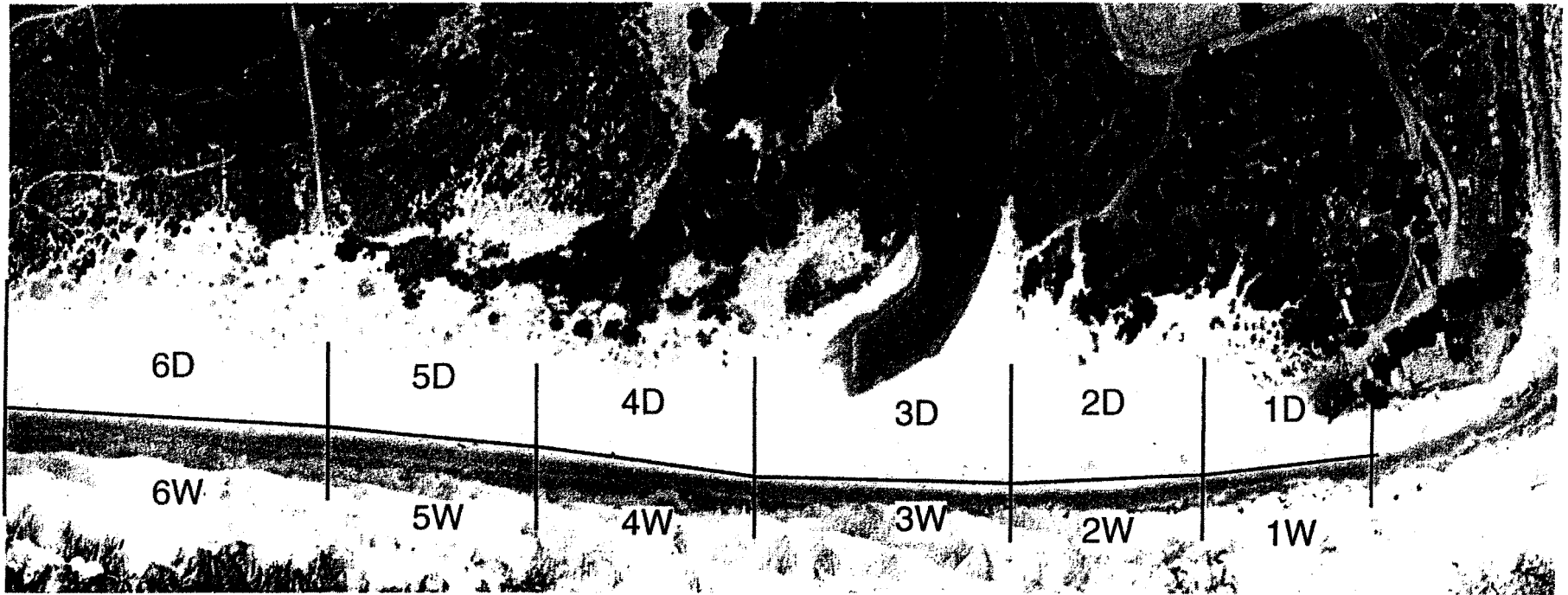


Figure 3b. Beach segments as referred in Figure 3a. The same beach segments are used to count people and plovers every week. D is dry sand and W is wet sand.

EXHIBIT 3b
CDP 4-01-139
Beach Segments

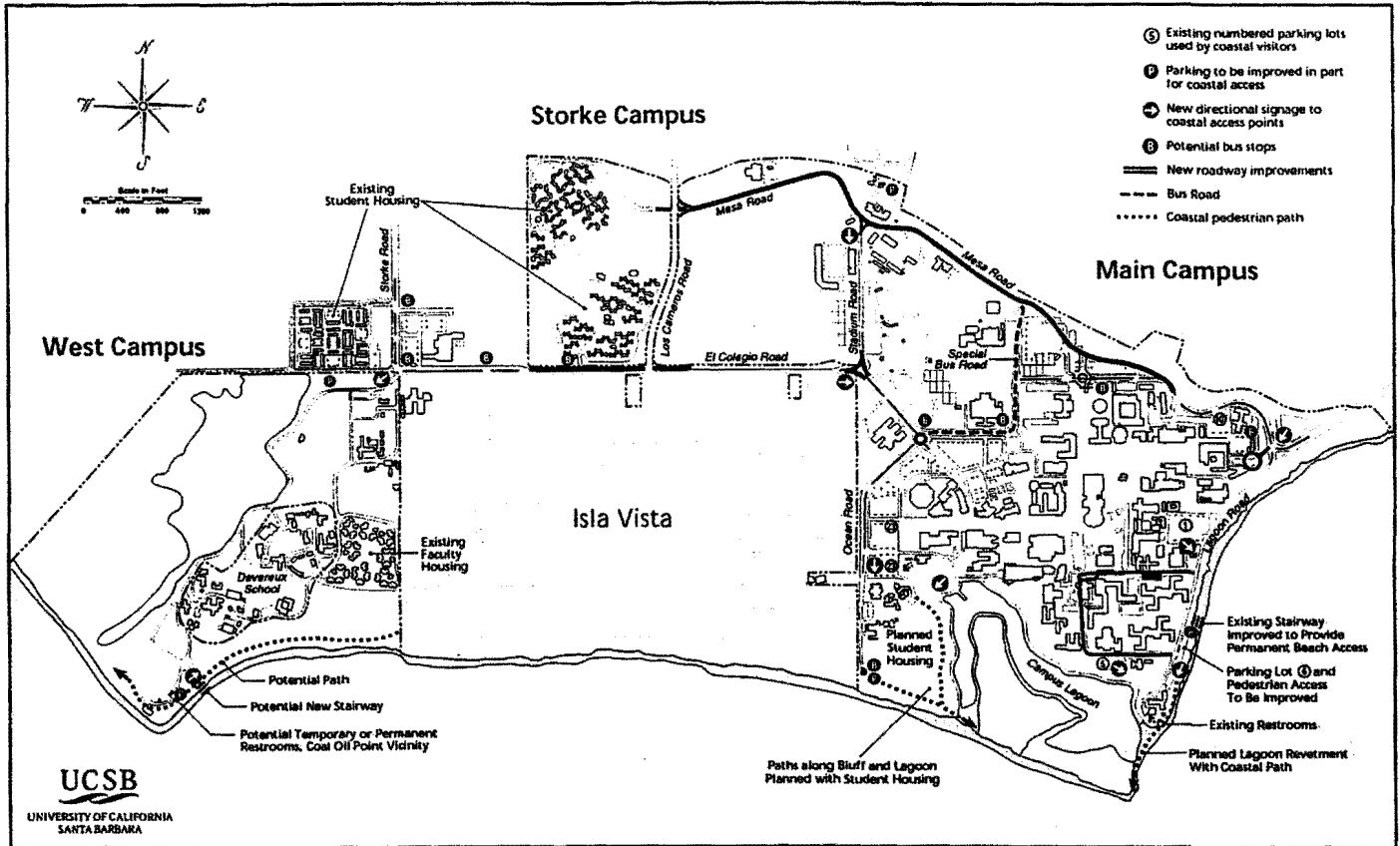


FIGURE 27 Coastal Access Improvements

2.11.7
LRDP

EXHIBIT 4
CDP 4-01-139
LRDP Coastal Access

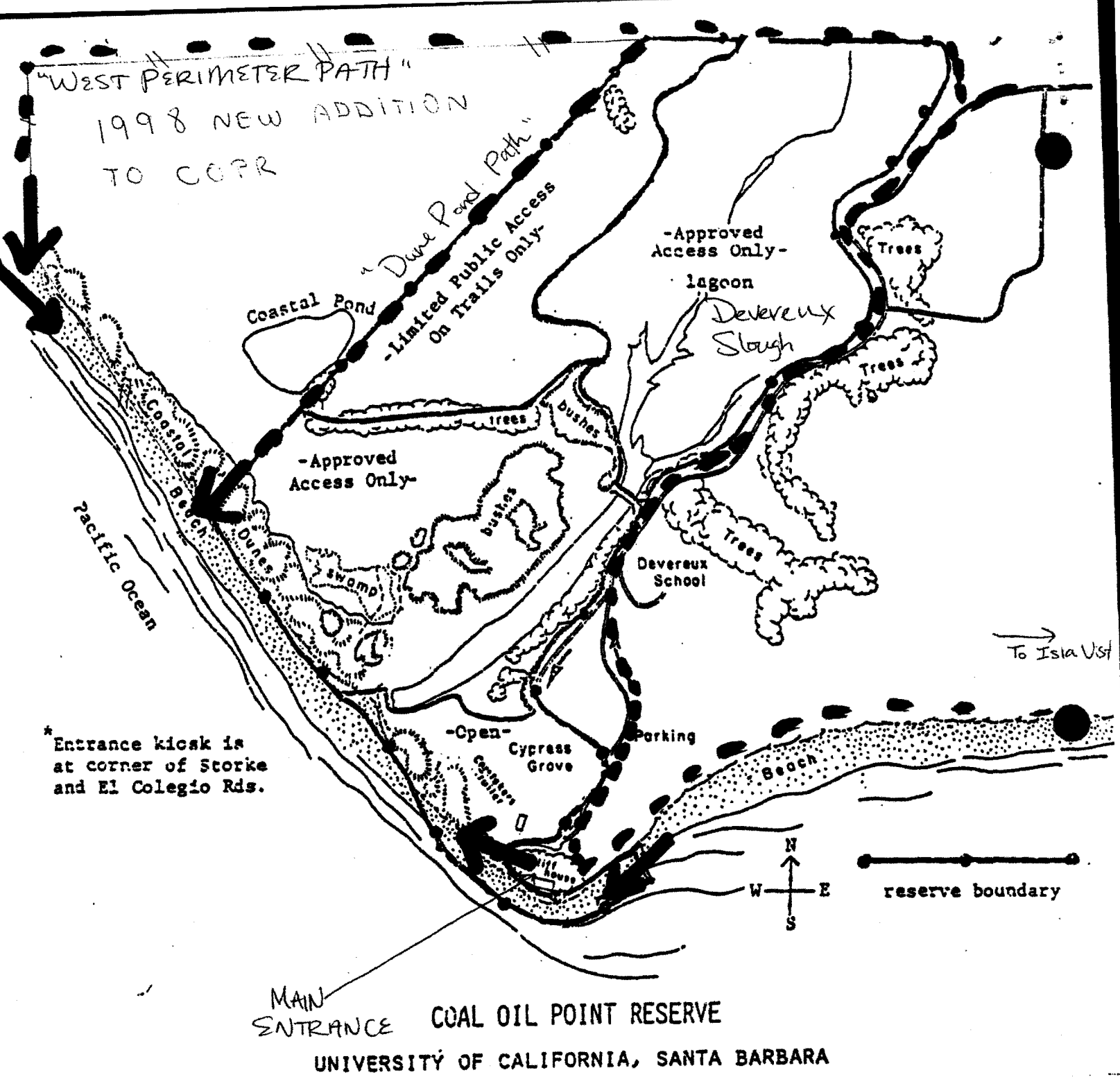


Figure 1. Proposed access plan for Coal Oil Point Reserve in 1984. Public access is basically the same today. However, several features have changed since then and a new access plan for Coal Oil Point Reserve is being proposed in the 2001 Coal Oil Point Draft Management Plan. For example, (1) the COPR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

→ PRIMARY ACCESS PO

EXHIBIT 5
CDP 4-01-139
Existing Coastal Access at COPR

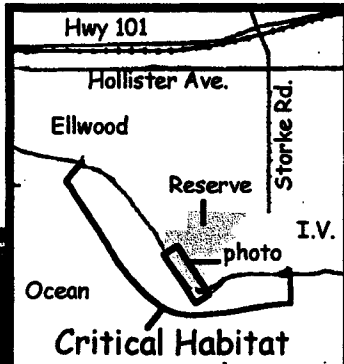
ENTERING SNOWY PLOVER CRITICAL HABITAT

Near extinction

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

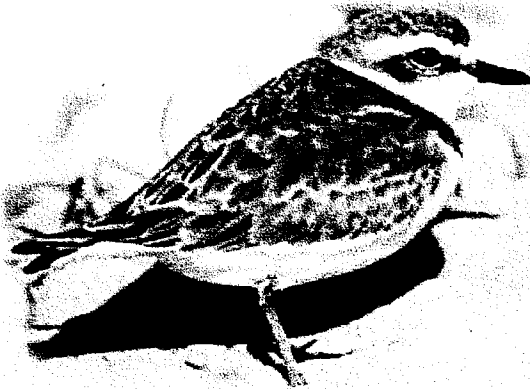
Conservation

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.

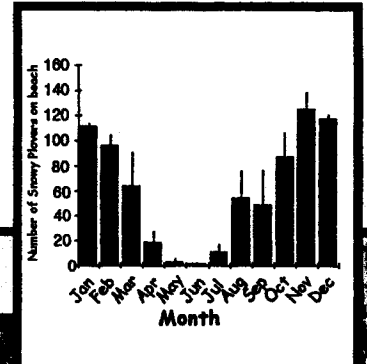
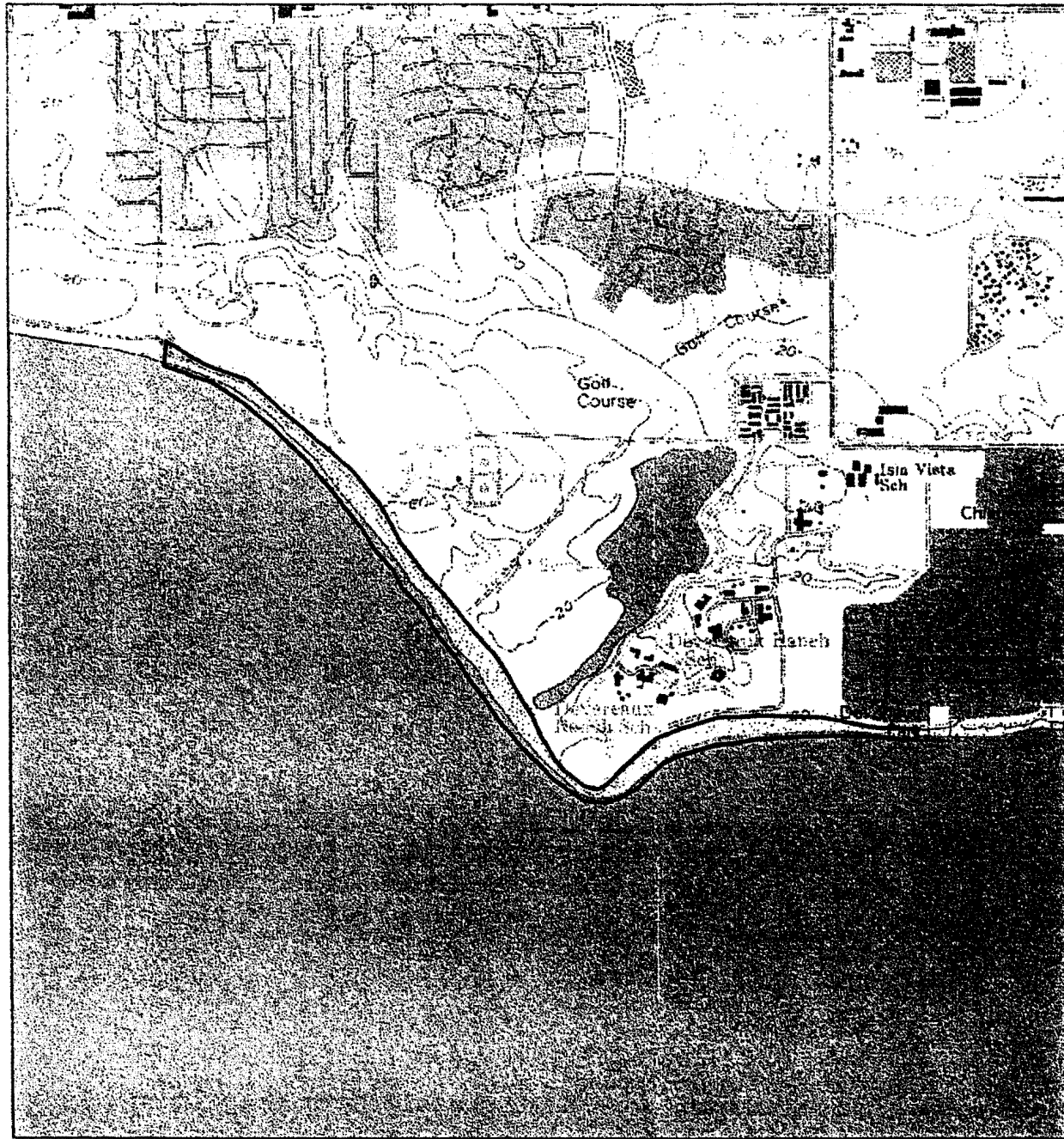


EXHIBIT 6
CDP 4-01-139
Snowy Plover
Interpretive Sign

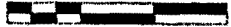
Figure L-112. Devereaux Beach (CA-88)



0.2 0 0.2 0.4 Miles



0.2 0 0.2 0.4 Kilometers



L-113

EXHIBIT 7
CDP 4-01-139
USFWS Designated
Snowy Plover Critical
Habitat