CALIFORNIA COASTAL COMMISSION
CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
(831) 427-4863

RECORD PACKET COPY

W12

MEMORANDUM

January 27, 2005

TO: Commissioners and Interested Parties

FROM: Charles Lester, Deputy Director
Steve Monowitz, Coastal Planner

RE: **Annual Review of Coastal Development Permit Amendment 4-82-300-A5 for the Oceano Dunes State Vehicle Recreation Area (ODSVRA), San Luis Obispo County.** For public hearing and possible Commission action at its meeting of February 16, 2005 in Monterey

---

I. Summary:

The Oceano Dunes Recreational Vehicle Area (ODSVRA), at the northern end of the Nipomo Dunes complex in southern San Luis Obispo County, is a popular destination for off-highway vehicle (OHV) recreation, and supports important habitat for numerous species of rare plants and animals, including significant nesting areas for the threatened Western snowy plover and the endangered California least tern. Pursuant to the terms of a 1982 Coastal Development Permit (CDP) issued for new park facilities, the Commission has periodically reviewed whether recreational use limits and resource management measures are effectively protecting the environmentally sensitive habitat areas of the park. As amended in 2001, CDP 4-82-300-A5 established a Technical Review Team (TRT) and Scientific Subcommittee to analyze resource protection issues and advise the ODSVRA on management measures. The conditions of that amendment require the permit to be renewed annually by the Commission, at which time the Commission may institute an alternative approach to resource management and/or require implementation of specific management measures.

II. Staff Recommendation:

Staff recommends that the Commission take no action to change the terms of Coastal Development Permit 4-82-300-A5, and send a letter to the ODSVRA Superintendent requesting implementation of the Technical Review Team's Scientific Subcommittee recommendations attached as Exhibit 5, which should be supplemented to include a recommendation on the proposed method of protecting and enhancing the habitat quality of the protected nesting area. The letter should also identify the overdue work products that must be completed by the TRT and its Scientific Subcommittee in order to carry out the terms of CDP 4-82-300-A5. Finally, the letter should request the Superintendent to work with the Scientific Subcommittee to better understand the cause of the decline in plover fledgling rates experienced during the 2004 nesting

season, and to improve monitoring, management and reporting procedures in a manner that would improve tracking and protection of plover fledglings. A draft letter is attached as Exhibit 1.

III. Background:

In 1982 the Coastal Commission approved Coastal Development Permit (CDP) No. 4-82-300 for the construction of habitat fencing and entrance kiosks at Oceano Dunes State Vehicular Recreation Area (ODSVRA). That permit and subsequent amendments have established limits to the numbers of vehicles and campsites allowed, and required ongoing reviews to ensure that off-highway vehicle (OHV) recreation is managed consistent with the protection of sensitive dune habitats.

The various amendments to CDP 4-82-300 have employed different procedures to review whether management measures are effectively protecting the environmentally sensitive habitat areas contained within the park. On February 14, 2001, the Commission endorsed State Park's proposal to establish a Technical Review Team (TRT) as an alternative to the carrying capacity approach established in 1994. The TRT was created to oversee monitoring of environmental and use trends in the Park, and to advise the Superintendent on resource management issues. As a condition of Commission approval, the TRT was required to include a Scientific Subcommittee that was to identify, develop and evaluate the scientific information needed by decision makers to ensure that the natural resources are adequately managed and protected. The Commission also required the permit to be renewed annually. Specifically, Special Condition 2 states:

> **Renewal of Permit.** Annually, the Commission shall review the overall effectiveness of the Technical Review Team in managing vehicle impacts at the ODSVRA. If the Commission is satisfied with the review, this amendment will remain in effect for an additional year. A longer permit may be requested in the future. Otherwise, an alternative approach to resource management, or set of management measures, may be instituted through this review process.

This is the fourth annual review conducted since the 2001 amendment, which remains in effect as originally approved. Although the Commission has not modified permit conditions in previous reviews, it has requested implementation of specific management measures. In 2003, the Commission voted 7 to 1 to recommend that State Parks expand the portion of beach seasonally closed to recreational use in order to protect Snowy Plover and Least Tern nesting areas. This expansion was carried out late in the 2003 season, and therefore provided little benefit to breeding plovers.[1] In 2004, the Commission requested that State Parks reconsider its decision to reject the Point Reyes Bird Observatory (PRBO) and Scientific Subcommittee's

[1] Scientific Subcommittee analysis of management measures implemented in 2003.

recommendation to close the nesting area on a year-round basis in order to protect habitat quality[2]. This measure was not implemented by State Parks in 2004.

IV. Analysis:

A. Summary of 2004 Nesting Season

The 2004 nesting season was marked by a substantial increase in the number of snowy plovers using the beach and dune habitat of the park, with 147 nests counted, in comparison to 95 nests in 2003. However, there was a notable reduction in fledgling rates; only 66 of the 263 (25%) snowy plover chicks that hatched successfully fledged, in comparison to the 68% fledgling rate documented in 2003, and 56.5 % in 2002. The 2004 nesting report prepared by State Parks states that predation is suspected to be the major factor in this decline. State Parks has been implementing a predator control program since 2002. The nesting report does not offer an explanation or hypothesis as to why the predator control program was not as successful in protecting plover chicks in 2004, or if other factors may underlie the decline in fledge rate.

Appendix F to the 2004 nesting report documents five events of predation that resulted in the death of six snowy plovers (two adults and four chicks), and ten plover deaths (three adults and seven chicks) for reasons other than predation. One of these deaths occurred from entanglement within the mesh top of an enclosure.[3] The remaining nine documented non-predatory related plover deaths were attributed to "unknown causes", and necropsy reports were not provided, despite the 2003 recommendations of the TRT and the Coastal Commission to include such reports. The fate of the remaining 181 plover chicks that hatched, but did not fledge, is undocumented. In an effort to understand the cause of the significant decline in fledgling rates and avoid any further declines in the future, the letter recommended by staff requests the Superintendent to work with the Scientific Subcommittee to update monitoring, management and reporting procedures in a manner that would improve tracking and protection of plover fledglings.

Nesting by the California least tern at the park occurred at lower levels in 2004 than in 2003, with a reduction from 79 nests last year to 63 nests this year. There was also a reduction in clutch hatching rates; from 76% in 2003 to 70% in 2004. The 2004 nesting report estimates that at least twenty-five of the sixty-nine least tern chicks that hatched (36.2%) successfully fledged. The 2004 nesting report does not include estimates of least tern fledgling rates for previous years. (Data regarding fledgling rates is not as readily available for least terns as for plovers due to differences in behavior and monitoring techniques.) Appendix F to the report documents the death of 7 least terns (3 chicks and 4 juveniles) to predation, the death of a juvenile tern to disease, and the death of one tern chick to unknown causes.

---

[2] March 22, 2004 letter from Chairman Mike Reilly to State Parks Director Ruth Coleman, attached as Exhibit 2

[3] Single nest exclosures with mesh tops were erected in the southern portion of the nesting area to protect nests from ravens. Mesh tops were removed immediately after the plover death from entanglement was documented.

The TRT's Scientific Subcommittee reviewed the 2004 nesting season report, and prepared recommendations and comments that are attached to this report as Exhibit 5. The subcommittee comments state "looking at the big picture, it was not a bad year", despite the reduction in the snowy plover fledge rate. This assessment is based on an increased use of the area by plovers, very good hatch rates, a fledgling rate of about one chick per male plover (a goal of the US Fish and Wildlife Service Draft Recovery Plan), and the "tremendous amount of effort that has been expended to make the program at ODSVRA successful."

B. Evaluation of TRT Effectiveness

As required by the conditions of 4-82-300-A5 (attached as Exhibit 3), the TRT, now in its fourth year of operation, should be making management recommendations to the superintendent based on the findings of priority research tasks. The TRT should also be updating research tasks, taking into consideration the specific resource management issues identified by Special Condition 5. Pursuant to this condition, the TRT and the ODSVRA Superintendent must prepare an annual report providing a summary of these activities.

The cover letter for the submitted fourth annual report is attached as Exhibit 4, and it's various attachments can be obtained by contacting the Commission staff (the full report will be available for review at the February 16, 2005 public hearing). The report partly addresses the requirements of Special Condition 5 by providing a summary of recreational use, and highlighting TRT and Scientific Subcommittee activities and accomplishments during 2004. The report indicates that 2004 recreational use levels stayed within the limits established under CDP 4-82-300-A5, and that the TRT's evaluation of management issues was primarily focused on a review of the 2004 nesting season report. The TRT also reviewed and discussed a report on steelhead monitoring in lower Arroyo Grande creek.

While the TRT continues to provide a forum for stakeholders to discuss annual nesting reports and monitoring and management techniques, it has not made progress in identifying and completing the scientific studies required to maximize the effectiveness of resource protection. In December 2002, the Scientific Subcommittee identified and ranked six research and management topics. The staff report prepared for the Commission's 2003 Annual Review identified that "further development and implementation of these studies will be an important step for the TRT to complete as soon as possible, so that the research can be applied to the development of long-term management measures in coordination with the Habitat Conservation Plan currently under development". The staff report for the 2004 review states that "the continued lack of progress in this regard has interfered with the TRT's ability to provide the level of input on park management issues envisioned by CDP 4-82-300-A5".

The TRT's attention to research priorities remains generally the same as that which was reported to the Commission in 2004. The top two studies identified by the Scientific Subcommittee in 2002 (an evaluation of the impacts of nighttime recreational vehicle riding, and an analysis of wintering shorebirds) are underway, but are not available for review. To date, the TRT has not taken any action to prioritize the research tasks identified by the Scientific Subcommittee. Nor has the TRT or the scientific subcommittee reviewed scopes of work for these studies, as

required by Special Condition 5. Special Condition 5 also requires annual reports to identify the basis under which the TRT prioritized its work for the year. Such a discussion is not contained in this year's report.

As a consequence of these deficiencies, the TRT has only partially achieved the objectives laid out by CDP 4-82-300-A5. Although it has provided a forum for stakeholders to express their concerns and opinions, and the opportunity for scientific review of annual nesting season reports, it has not fulfilled its mandate to systematically pursue the scientific information that would enable more informed decisions on resource management issues. The letter to the State Park's superintendent, recommended by staff, attempts to address this problem by encouraging greater focus on this work in 2005.

B. Evaluation of Current Management Measures

The breeding success of the local and regional populations of snowy plover and least tern that use the Oceano Dunes plays an important role in the statewide recovery effort of these species. Continued and improved protection of the threatened Western Snowy plover and endangered California least tern at the ODSVRA is essential for the protection and enhancement of these rare biological resources. Towards this end, State Parks has been implementing a predator management program that has contributed to improved Snowy plover and Least tern fledgling success rates in 2002 and 2003. State Parks also continues to implement use limits, protective fencing, and other measures to minimize the impacts of recreational use on the parks sensitive habitat areas in accordance with the interim limits established by 4-82-300-A5, and in coordination with other wildlife agencies.

In evaluating the adequacy and effectiveness of these measures, issues raised in prior reviews include the size of the protected nesting area, and whether the nesting area should be protected on a year round basis. Specifically, with regard to size, there has been controversy regarding the appropriate boundary for the northern extent of the protected area. Prior to 2003, the seasonal exclosure extended south from post marker seven (see map attached as Exhibit 6). In 2002, PRBO, the Scientific Subcommittee, and the Coastal Commission recommended that State Parks extended the protective fencing to Post Marker 6. This was implemented in July 2003 pursuant to the terms of a legal settlement, and state continued to provide this larger area of protection during the 2004 nesting season (March 1 – September 31). It is expected that the protective fencing will again extend to Post Marker 6 during 2005, as recommended by ODSVRA staff.

With regard to the duration of protective measures, PRBO and the Scientific Subcommittee recommended, in 2003, that vehicles be excluded from the nesting area throughout the year, given the results of a test plot demonstrating that such a closure would result in beneficial habitat changes and increased nesting during the breeding season. Given the 72.7% increase in the number of nests in the test plot, balanced against a moderate to minor loss of off-season recreational value, the Commission requested State Parks to reconsider its decision to not implement the recommendation. Despite these recommendations, the year round closure of the

nesting area was not implemented by State Parks in 2004. The 2004 annual nesting report states, however, that:

> *Discussions with the USFWS and CDFG have resulted in the closure of an 11 acre area from post #7 to the 7.4 reveg area to protect natural habitat features during the non-breeding season. This is an interim measure pending further evaluation and discussion. Consideration should also be given to the establishment of small islands throughout the southern exclosure area that would be fenced to protect a mosaic of natural features for the 2005 nesting season. This would be an alternative to the 11 acre closure and would not exceed 11 acres. This alternative will allow for managed recreational access, such as camping and OHV riding in the area.*

The 2004 nesting report further proposes to enhance habitat qualities within the nesting area immediately prior to the nesting season as follows:

> *Habitat enhancement measures may include the planting of hummock forming native plants in fiber pots which would be removed during the non-breeding season, and the distribution of large amounts of natural materials including driftwood, shells, small rocks, and kelp at the onset of the breeding season. These measures should be attempted for the 2005 nesting season before other more aggressive measures are considered.*

This proposal not been specifically reviewed by the Scientific Subcommittee or the TRT as of the writing of this report. In the Commission staff's opinion, it is unlikely that the installing of potted plants and distributing natural materials will result in equivalent habitat quality to that which would be realized through a year round closure. In an effort to resolve this issue, the letter to State Parks that has been drafted by staff requests State Parks to pursue the Scientific Subcommittee's input, and to abide by their recommendation.

V. Conclusion:

While the TRT continues to provide a useful forum for interested parties to discuss annual nesting results and monitoring and management techniques, it has not completed the work products required by CDP 4-82-300-A5, or demonstrated its ability to provide meaningful input on park management issues. Renewing CDP 4-82-300-A5 without change, and sending a letter to the ODSVRA Superintendent identifying the work that needs be completed to comply with the permit, will provide the TRT with the opportunity to address these needs, including the following:

- a prioritized list of research tasks;
- scopes of work for priority studies;

- reports on results of the investigations conducted pursuant to previously established priorities (i.e., studies regarding wintering shorebirds and the impacts of night time vehicle use); and,

- recommended changes to current resource management techniques that respond to the results of these studies.

The letter should also request that State Parks obtain and abide by the recommendations of the TRT's Scientific Subcommittee regarding:

- measures that should be implemented during the non-breeding season to protect and enhance the habitat quality of the nesting area; and,

- opportunities to update monitoring, management and reporting procedures in a manner that would improve tracking and protection of plover fledglings (e.g., as necessary to understand and address the decline in plover fledgling rates during the 2004 season).

Attached Exhibits:

Exhibit 1: Draft letter to ODSVRA Superintendent
Exhibit 2: March 22, 2004 letter from Chairman Mike Reilly to State Parks Director Ruth Coleman
Exhibit 3: Special Conditions of 4-82-300-A5
Exhibit 4: 2004 Annual Report Cover Letter
Exhibit 5: 2004 Scientific Subcommittee Recommendations
Exhibit 6: Park Map

CALIFORNIA COASTAL COMMISSION
CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
PHONE: (831) 427-4863
FAX: (831) 427-4877

DRAFT

February 17, 2005

Andrew Zilke, Acting Superintendent
Oceano Dunes State Vehicular Recreation Area
576 Camino Mercado
Arroyo Grande, CA 93420

Subject: **Renewal of Coastal Development Permit 4-82-300-A5**

Dear Mr. Zilke:

At the February 16, 2005 meeting in Monterey, the Coastal Commission conducted our annual review of the overall effectiveness of the methods being used to manage vehicle impacts and protect sensitive habitats at the Oceano Dunes State Vehicular Recreation Area (ODSVRA). We wish to thank you for your presentation before the Commission, and to recognize the significant efforts your Department continues to make towards the protection and enhancement of natural resources at the ODSVRA. In particular, the Commission would like to acknowledge last year's achievement of an important goal of the US Fish and Wildlife Services Draft Recovery Plan for the Western snowy plover – the successful fledgling of at least one plover chick per nesting male adult.

In light of this accomplishment, and the Department's ongoing commitment to on-going resource protection in coordination with the involved resource agencies and stakeholders, the Commission took no action to modify the terms of Coastal Development Permit 4-82-300-A5. The Commission did, however, indicate its concern about the significant reduction in plover fledgling rates that occurred in 2004. To address this concern, we request that you work with the Scientific Subcommittee to analyze the cause of this decline, and to update monitoring, management and reporting procedures in a manner that would improve tracking and protection of plover fledglings during the upcoming nesting season.

The Commission also expressed its continued interest in resolving issues regarding the protection of habitat quality within the nesting area. In a letter to State Parks Director Ruth Coleman dated March 22, 2004, the Commission requested that State Parks reconsider its decision to not implement recommendations of the Point Reyes Bird Observatory and the Technical review Team's Scientific Subcommittee calling for the closure of the nesting area to vehicles on a year round basis. This request was made in recognition of the documented benefits to nesting habitats associated with such a closure, in comparison to a moderate to minor impact on off-season recreation opportunities.

As an alternative to implementing this recommendation, ODSVRA staff has proposed to "create" natural habitat features by placing potted plants, driftwood, shells, and kelp throughout the nesting area immediately prior to the breeding season. The Commission recommends that you

EXHIBIT NO. 1, p.1 of 2
APPLICATION NO.
4-82-300-A5 Annual Review
Draft Letter to Superintendent

pursue the input of the Scientific Subcommittee on this option, and implement the habitat quality protection measure recommended by the subcommittee.

Finally, our review of Technical Review Team activities and accomplishments over the past two years has identified significant tasks and work products required by CDP 4-82-300-A5 that have not been adequately addressed. The Commission is particularly concerned that the TRT has not made progress in obtaining and evaluating the scientific information needed to make informed resource management decisions. In order to enable the TRT to provide meaningful input on park management issues, and to facilitate the distribution of information that will be needed to effectively evaluate the Habitat Conservation Plan currently under development, the Commission strongly encourages you to work with the members of the TRT and Scientific Subcommittee to complete the following:

- a prioritized list of research tasks;
- scopes of work for priority studies;
- reports on results of the investigations conducted pursuant to previously established priorities (i.e., studies regarding wintering shorebirds and the impacts of night time vehicle use); and,
- recommended changes to current resource management techniques that respond to the results of these studies.

The Coastal Commission values the opportunity to work with cooperatively with ODSVRA staff, and respectfully submits the above recommendations, in conjunction with its renewal of Coastal Development Permit 4-82-300-A5, with the intent of providing maximum resource protection in a manner consistent with the state mandated recreational uses of the park. If you have any questions regarding these matters, please contact staff analyst Steve Monowitz in our Santa Cruz office at (831) 427-4863.

Sincerely,

Meg Caldwell, Chair
California Coastal Commission

CDP 4-82-300-A5
Annual Review
CCC Exhibit 1
(page 2 of 2 pages)

STATE OF CALIFORNIA – THE RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, GOVERNOR

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200
FAX (415) 904-5400

March 22, 2004

Ruth Coleman, Director
California Department of Parks and Recreation
P O Box 942896-0001
Sacramento, CA 94296-0001

Subject: Annual Review of Coastal Development Permit 4-82-300 for the Oceano Dunes State Vehicular Recreation Areas (ODSVRA)

Dear Director Coleman:

At our February meeting in San Diego, the Commission conducted our annual review of the effectiveness of your departmental management practices in managing vehicle impacts on coastal resources, including Western Snowy Plover and California Least Terns, at Oceano Dunes. We wish to thank you for your presentation before the Commission and to recognize and congratulate the Department for the significant increase in successful plover fledglings in 2003, both at Oceano and systemwide.

In particular, the Commission wishes to acknowledge the commitment of the Department to implement in 2004 the following recommendations of the Scientific Subcommittee (SCC):

- Oso Flaco (exclosures and symbolic fencing)
- Expansion of Southern Exclosure to pole 6
- Retain and add skilled monitors
- Continue banding Least Tern and Snowy Plover chicks
- Monitoring Least Tern juveniles to estimate fledging success
- Improve Southern Exclosure Perimeter Fence
- Reduce trespass along Southern Exclosure shoreline.
- Improved procedures for annual Necropsy report
- Continue Predator Control Program

As a result of the improved outcomes and these commitments to management of Oceano during 2004, the Commission took no action to modify the terms of CDP 4-82-300 in order to provide an additional year for the ODSVRA to fully implement the recommendations provided by the Scientific Subcommittee on January 9, 2004 (please see Exhibit 2 of the attached memo).

Of particular concern is the recommendation of the SCC to retain the 7 Exclosure and part of the 8 Exclosure during the fall and winter to protect the habitat for the 2005 breeding season. The 7 Exclosure site closed to vehicles during the non-breeding season experienced a 72.7% increase in the number of plover nests in 2003 compared to 2002. This is 4.6 times the increase of 15.8% in

EXHIBIT NO. 2, p. 1 of 2
APPLICATION NO. 4-82-300-A5 Annual Review
2004 letter from CCC

nest numbers observed at the 8 Exclosure. In light of this dramatic increase in success balanced against a moderate to minor loss of off-season recreational value, it is our recommendation that the Department reconsider its position on this important recommendation.

Further, given the increased fledgling success with the management practices already adopted, the Commission would strongly encourage the Department to incorporate and codify these practices in the ODSVRA/San Luis Obispo Coast State Parks Multi-Species Habitat Conservation Plan which is scheduled for agency reviews and public input and scoping processes during 2004.

Finally, we would encourage the ODSVRA to work with our staff in the coming year to assess the effectiveness and future utility of the TRT as well as the future schedule for Commission permit review and to present recommendations on these issues at the next annual review.

The Coastal Commission hopes to maintain a cooperative working relationship with the ODSVRA in managing vehicle use in a manner that also provides effective protection of the sensitive habitats and valuable biological resources at Oceano. Accordingly, the Commission has effectively renewed CDP 4-82-300 and submitted the above recommendations with the intent of continuing to increase fledgling success consistent with maintaining the state mandated recreational uses of the park.

Thank you for your continued attention to this important issue.

Sincerely,

Mike Reilly, Chairman
California Coastal Commission

MR:ps

Attachment

Cc: Andrew Zilke, Acting Superintendent, Oceano Dunes SVRA

CDP 4-82-300-A5
Annual Review

CCC Exhibit 2
(page 2 of 2 pages)

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 OF APPROVAL

1. **Scope of Permit.** This permit amendment replaces Special Conditions 3B, 3D, and 6 of CDP 4-82-300. This permit amendment also authorizes the institution of interim vehicle (street-legal, off-highway vehicle, and camping) limits at the ODSVRA, and the establishment of an ODSVRA Technical Review Team, for an initial one-year period from the date of approval of the revised conditions and findings.

2. **Renewal of Permit.** Annually, the Commission shall review the overall effectiveness of the Technical Review Team in managing vehicle impacts at the ODSVRA. If the Commission is satisfied with the review, this amendment will remain in effect for an additional year. A longer permit term may be requested in the future. Otherwise, an alternative approach to resource management, or set of management measures, may be instituted through this review process.

3. **Interim Vehicle Limits.**

   a. **Interim Day-Use Vehicle Limits.** Except as qualified by 3d, interim limits on motor vehicle use on the beaches and dunes of Oceano Dunes SVRA shall be no more than 2,580 street-legal vehicles per day. This limit does not include off-highway vehicles, or street-legal vehicles attributable to allowed overnight camper use within the ODSVRA.

   b. **Interim Camping Limits.** Except as qualified by 3d, interim limits on overnight motor vehicle use on the beaches and dunes of Oceano Dunes SVRA shall be no more than 1,000 camping units (i.e. 1,000 street-legal vehicles) per night. This limit does not include off-highway vehicles or street-legal vehicles attributable to allowed day-use within the ODSVRA.

   c. **Interim Off-Highway Vehicle Limits.** Except as qualified by 3d, interim limits on off-highway vehicle use on the beaches and dunes of Oceano Dunes SVRA shall be no more than 1,720 off-highway vehicles at any given time. This limit does not include the street-legal vehicles used to tow or trailer the OHVs into the ODSVRA.

   d. **Holiday Periods.** Interim street-legal and off-highway vehicle limits may be exceeded only during the four major holiday periods of Memorial Day (Saturday through Monday), July 4th (one day and any adjacent weekend days), Labor Day (Saturday through Monday), and Thanksgiving (Thursday through Sunday).

CDP 4-82-300-A5
Annual Review
CCC Exhibit 3
(page 1 of 4 pages)
Permit Conditions

4. **Technical Review Team.** The Technical Review Team (TRT), advisory to the Superintendent of the Oceano Dunes State Vehicular Recreation Area, shall be established within three months, and shall meet within six months, from approval of the revised conditions and findings of this coastal development permit amendment (4-82-300-A5). A Charter for the TRT, establishing members*, roles and procedures for the Team, shall be submitted to the Executive Director for review within one year of approval of the revised conditions and findings of this coastal development permit amendment.

   a. The Charter shall establish a specific structure and process in order for the TRT to do at least the following:

      i. Assist in building community support through problem solving, consensus building, new constituency development, and increasing understanding about the ODSVRA; and

      ii. Develop recommendations to the Superintendent of the ODSVRA regarding additional monitoring studies, adjustments to day and overnight use limits, and management strategies.

   b. The Charter shall also include at least the following:

      i. A provision to create a scientific subcommittee to identify, develop and evaluate the scientific information needed by decision-makers to ensure that the ODSVRA's natural resources are adequately managed and protected. The subcommittee shall be composed of resource experts representing the five government agencies (CCC, SLO County, USFWS, DFG, DPR) and at least two independent scientists with expertise in Western snowy plover, California least tern, steelhead trout or other species of concern, as well as ecological processes to analyze technical data and provide scientific recommendations to the TRT: and

      ii. A provision to submit a list of proposed members of the scientific subcommittee to the Executive Director for review and approval.

   c. The Charter shall establish a specific structure and process in order for the scientific subcommittee to do at least the following:

      i. Recommend to the TRT the scientific studies and investigations that may be necessary to develop information needed by resource managers;

      ii. Advise the TRT regarding the protection of the SVRA's natural resources by helping identify and review needed research measures and restoration efforts to rebuild or protect the ODSVRA natural resources;

      iii. Evaluate monitoring results and reevaluate monitoring protocols contained in Oceano Dunes SVRA annual reports for the Habitat Monitoring System, reports on the breeding, nesting and fledgling success of the western snowy plover and California least tern populations in the SVRA, and other reports related to the environmental impacts of recreational activities;

iv. Provide comments on the adequacy of various scientific research studies and make management recommendations to the TRT: and

v. Submit the full recommendations of the scientific subcommittee to the Commission and make them available to the public, as part of the annual review process required in Special Condition 2.

* Members of the TRT shall include, but are not limited to, those listed in the Department of Park & Recreation's amendment submittal (noted on page 10-11 of this staff report) and a representative of the residential community adjacent to the ODSVRA.

5. **Annual Reports.** The TRT and the ODSVRA Superintendent shall prepare annual reports (for the period of October to September) summarizing annual recreational use and habitat trends at the Park; and highlighting the TRT's major accomplishments (including progress made towards meeting the objectives of the TRT), projects, correspondence, and recommendations as well as a summary of subcommittees, working groups, and task force activities. The first annual report shall include (1) a draft or final Charter for the TRT, and (2) a description of the process by which the TRT will rank research and management questions and priorities. The second annual report shall include (1) the final Charter for the TRT (if not submitted with the first annual report), (2) the TRT's ranking of research and management questions and priorities, and (3) a scope of work for those projects identified as the highest priority. Subsequent reports will include a status report on the progress of those projects as well as updates to research and management priorities and the corresponding scopes of work for addressing those new priorities. One component of the Commission's annual review will be to evaluate the progress of the TRT's work as measured against the submitted work plans.

In identifying and selecting the priority research and management questions and projects, the TRT shall consider information developed by the USFWS and shall include the following:

a. Appropriate management techniques for the western snowy plover, California least tern, and steelhead trout including an evaluation of:

i. How the geographic location of nests, proximity of nests to foraging areas, and nest closure techniques affect the hatching and fledgling success of the species,

ii. What studies may be necessary to determine appropriate management techniques, or what known management techniques could be put in place, for protecting each species of concern, and

iii. The potential environmental, recreational and economic costs and benefits of alternative beach/dune habitat protection strategies.

b. Appropriate management techniques for protecting water quality and dune habitats from potential pollutants that might result from motor vehicle fluids or other contaminants that might enter the ODSVRA and ocean through polluted runoff or direct discharges; and

c. The success of past revegetation efforts within the ODSVRA and the potential need for continuing or expanding those efforts, including expansion of vegetation exclosures.
d. Conduct a comprehensive, long-term monitoring and comparative analysis of the resources impacts associated with varying levels of use, including the highest (peak-use) attendance periods.

If alternative research and management questions and projects are identified as a higher priority than those listed in a through d above, the annual reports shall discuss the basis for such a determination. Annual reports shall be submitted to San Luis Obispo County and the California Coastal Commission for informational purposes no later than January 1st of the following year. The first annual report (or portion thereof) shall be completed and submitted to the Commission no later than January 1, 2002.

IV. FINDINGS AND DECLARATIONS

A. Project Description and Background

1. Project Location

Oceano Dunes State Vehicular Recreation Area (ODSVRA), formerly Pismo Dunes SVRA (PDSVRA) is located on the central California coast along the southern coastal region of San Luis Obispo County. Primary access to this area is via Highway 101 and California State Highway 1. The ODSVRA is bordered on the north by the non-vehicular section of Pismo State Beach, on the west by the Pacific Ocean, on the south by Oso Flaco Lake and along its eastern and southeastern boundaries by the City of Grover Beach and Oceano.

ODSVRA encompasses 3,590 acres and includes approximately six miles of sandy beach; about 1,500 acres are available for OHV use. It varies in width from a few hundred yards along its northerly two miles to up to three miles wide along its southerly portion (see Exhibit 2). ODSVRA itself is divided into different regions based upon allowable activities and include areas set aside strictly for resource protection, street legal vehicle use, and a combination of street legal/off-highway vehicle use (see Exhibit 3). The separation and delineation of these specific areas was developed through the past cooperative efforts of the Coastal Commission and County of San Luis Obispo Board of Supervisors, the California Department of Fish & Game (DFG) and the California Department of Parks & Recreation (DPR).

Land use patterns of the lands adjoining the study area are characterized (from north to south) as ranging from urban commercial and industrial, and eventually shifting to rural agricultural and industrial. Specifically, along ODSVRA's narrow northern end, urban retail establishments, commercial campgrounds and urban residential land uses characterize the eastern border. Progressing south, land use is characterized by a small rural airport, a State Park dune preserve, agricultural fields, an oil refinery and its associated oil fields, and open ranch lands.

CCC Exhibit 3
(page 4 of 4 pages)

INTERACTIVE
PLANNING AND MANAGEMENT, LLC

DISPUTE RESOLUTION
MEETING FACILITATION
STRATEGIC PLANNING
PROGRAM MANAGEMENT

January 12, 2005

Mr. Peter M. Douglas
Executive Director
California Coastal Commission
45 Fremont Street
San Francisco, CA 94105

Re: Oceano Dunes State Vehicular Recreation Area (ODSVRA) Technical Review Team (TRT) Fourth Annual Report

Dear Mr. Douglas:

As required by the conditions and findings in Permit Amendment No. 4-82-300-A5, the TRT and the ODSVRA Superintendent are submitting this fourth annual report. As with the previous two reports, this 4th Annual Report has been prepared to also cover the calendar year period (January 2004 through December 2004).

Context

The TRT sought to meet three times during 2004 – on January 13, 2004 to approve and transmit the previous Annual Report, on October 18, 2004 and on December 14, 2004 to review the 2004 Nesting Season report and Scientific Subcommittee recommendations. However, because no quorum was achieved for the October meeting, the October meeting was therefore considered an informal update for those participating TRT members regarding park activities, monitoring, management and Habitat Conservation Plan status.

Summary of Activities and Accomplishments – 2004

As with previous years, the ODSVRA undertook monitoring and management efforts based upon the recommendations of its Scientific Subcommittee and its own staff familiar with the resources present within and adjacent to the Park. The key substantive accomplishments of the ODSVRA during 2004 focused on preparing for the 2004 nesting season, review and transmittal of the scientific subcommittee's monitoring and management recommendations (also for the 2004 nesting season), furthering research and management priorities, steelhead surveys in Arroyo Grande Creek, and digesting the results of the 2003 nesting season. The Department transmitted to the Scientific Subcommittee and TRT *"Nesting of the California Least Tern and Snowy Plover at Oceano Dunes State Vehicular Recreation Area, San Luis Obispo, California 2004 Season"* prepared by the Department. This document was reviewed by the Scientific Subcommittee, which forwarded its recommendations to the TRT for their review and comment at the December meeting. Those recommendations and the TRT's commentary are provided in subsequent paragraphs within this correspondence.

The attachments* evidencing the work and progress this past year include the following:

1. List of Current TRT Members and Alternates (Attachment 1)
2. 2003 ODSVRA Day Use, camping and OHV Use Numbers (Attachment 2)

112 E. DE LA GUERRA STREET, NO. 7 ▫ SANTA BARBARA, CA 93101 ▫ (805) 568-1440 ▫ 568
john@interactiveplans.com

*Attachments available for review at Feb. 16, 2005 Hearing, or upon request of Commission staff.

EXHIBIT NO. 4, p. 1 of 8
APPLICATION NO. 4-82-300-A5 Annual Review
Annual Report Cover Letter

3. Report on 2003 Breeding Season and Attachments (Attachments 3)
4. Scientific Subcommittee recommendations on Western Snowy Plover/California Least Tern monitoring and management. (Attachment 4)
5. Information regarding Predatory Management Project (Attachment 5)
6. Lower Arroyo Grande Creek and Lagoon Fishery and Aquatic Resources report (Attachment 6) Recommendations regarding the recommendations of the scientific Subcommittee
7. Copies of the TRT Meeting Summaries from its 1/13/04 and 12/14/04 meetings (Attachment 7)

ODSVRA use factors for the 2003 and 2004 calendar years were 1.43 million and 1.76 million visitors respectively indicating an overall increase in usage of approximately 330,000 individuals. Part of this increase was due to an assessment and change in the conversion ratios that are used to convert vehicles to day users and to campers. Prior to July, 2004, the factor was 2.3 persons per vehicle for day use and 2.7 persons per vehicle for camping. From July forward, the factors are 3.5 persons per vehicle for day use and 3.8 persons per vehicle for camping. The levels of staffing were comparable between the two years. Overall use statistics are included in Attachment 2.

2004 Nesting Report Summary

The Scientific Subcommittee noted six key points from the Nesting Summary which warrant highlighting.

1. A substantial increase in the number of snowy plovers using the area;
2. Although only about 66 snowy plover chicks fledged, that number is about one chick per male, a goal of the Draft Recovery Plan;
3. A tremendous amount of effort has been expended to make the program at ODSVRA successful;
4. Although the snowy plover fledge rate was down, looking at the big picture it was not a bad year;
5. Use of the Oso Flaco area increased;
6. The hatching success rate was very good.

The following two paragraphs, taken directly from the 2004 Nesting Report itself provide details regarding the findings of the report.

> "Staff of Oceano Dunes State Vehicular Recreation Area (ODSVRA) and Point Reyes Bird Observatory Conservation Science (PRBO) monitored breeding California least terns *(Sterna antillarum browni)(terns,* least terns) and western snowy plovers *(Charadrius* alexandrinus)(plovers) at ODSVRA, San Luis Obispo County, California in 2004. All tern nests, with one exception, were located within a large seasonally fenced exclosure in the southern portion of the vehicle riding area (southern exclosure). The one tern nest was located in the open riding area. There were an estimated 47 pairs of breeding least terns. Of 63 tern nests a minimum of 70% hatched. Sixteen nests were known to fail, 9 were abandoned, 3 lost to unknown causes, 3 were depredated, and I had non-viable eggs. Sixty-nine chicks hatched and

were banded with the same color band combination, unique to the ODSVRA site and the year 2004. A minimum of 25 tern chicks are estimated to have fledged, resulting in an estimated 36% fledge rate."

"There was a minimum of 121 breeding plovers (67 males and 54 females). Twenty-two of the breeding plovers were banded as chicks and fledged from ODSVRA in 2003. 80% of the plover nests from known locations were inside the southern exclosure. One hundred thirteen nests were in the southern exclosure, 27 were at Oso Flaco, 5 were from uncertain locations, 1 was in the open-riding area and 1 was in the pipeline revegetation site. Of 147 plover nests, 75% hatched. 35 plover nests failed at ODSVRA in the 2004 season. 16 of these failed nests were abandoned. 10 of these abandoned nests were found with eggs undisturbed on the surface, 5 with eggs buried, and 1 abandonment was due to the death of one adult. In addition, of the 35 abandoned nests, 8 were depredated, one was lost to flooding and 10 failed to unknown causes. Of the 263 hatching plover chicks, 250 were banded. There were 13 unbanded chicks, the fate is known for 9 of these unbanded chicks. Sixty-six of 259 chicks whose fate was followed are known to have fledged. This shows a chick-fledging rate of 25.5%. One chick fledged per breeding male is the estimated number needed for snowy plover population stability. The 66 young fledged in 2004 approached, but did not reach, the number needed for population stability. Predation is suspected of being a major factor resulting in the low chick-fledging rate for snowy plovers."

TRT Review and Commentary of the 2004 Plover/Tern Breeding Report and Scientific Subcommittee Recommendations

The TRT met on December 14, 2004 to discuss the 2004 Plover/Tern Breeding Report and the Scientific Subcommittees recommendations regarding monitoring and management efforts for 2005. The TRT took the following actions regarding the recommendations contained within the draft recommendations:

Recommendation #1: Request U.C. Santa Cruz Predatory Bird Research Group (SBPBRG) to relocate its peregrine falcon hack site farther away from ODSVRA

The TRT made a consensus decision to support this recommendation. Laura Gardner indicated that she had contacted the SCPBRG to make such a request and was told that it was not feasible to relocate the hack site because it was the only one in California. The Department indicated that it would follow up on the recommendation and provide a written request as well.

Recommendation #2: Support efforts to get more experienced USDA Wildlife Services personnel

The TRT made a consensus decision to support this recommendation.

Recommendation #3: Take down closed pole traps that are close enough to nesting exclosures such that they present a predation problem

The TRT indicated its full support of this recommendation.

Recommendation #4: Install a large exclosure of no-climb fencing at Oso Flaco

There was considerable discussion regarding this recommendation which focused on public access issues. State Parks indicated their preference to install this exclosure north of the Oso Flaco boardwalk because the area is not heavily used, whereas local beach-goers utilize the area south of the boardwalk for fishing. Jim Suty indicated a preference to expand the exclosure to the south of the boardwalk so that opportunities for nesting further south could be maximized in order to encourage nesting birds to move south, away from the riding area. There was support by the TRT that the OHV division would explore development of alternative trail alignments to bypass closed areas if required.

Recommendation #5: Obtain more information as to what can be accomplished at Oso Flaco to provide better nesting habitat.

Several TRT members viewed this recommendation as being reflective of the need and benefits of adaptive management and noted the connection between this recommendation and recommendation #4 above. After some discussion, The TRT indicated its full support of this recommendation with the clarification that the referenced "natural areas" would be referred to as non-riding areas. It was also noted that the TRT should also revisit the research and management priorities as early as practical to further this and other recommendations.

Recommendation #6: Consider alternative approaches to least tern chick shelters.

Initially, concern was voiced over the potential for alternative approaches to chick shelters leading to incidental take of tern chicks. After some discussion, it was determined that the title of this recommendation be changed with the addition of words such that it reads: "Consider alternative approaches to the use of least tern chick shelters." In addition, the last sentence of the paragraph providing clarification of this recommendation was reworded to state: "Any testing with alternative chick shelters must be done based upon peer reviewed and published data available and in an experimental manner." With these revisions, the recommendation received the full support of the TRT.

Recommendation #7 Implement the recommendation to band least tern chicks to brood

There was general support for this recommendation. However, Jim Suty abstained from support because of the potential risks that may result from human contact with the birds and no requirement for banding as noted by Steve Henry of the USFW.

Scientific Subcommittee Accomplishments:

The Scientific Subcommittee completed a review of the results for the 2004 breeding season, discussed the 2004 Plover/Tern breeding report, and prepared its recommendations for implementation in the 2005 breeding season. Draft recommendations were reviewed by the TRT at its December 14, 2004 meeting and their comments have been noted above. The Scientific Subcommittee also reviewed the ODSVRA's responses to 2003 recommendations and made the following observations:

1. **Management for Habitat Quality in the Southern Exclosure— Recommendation Supported With Proposed Text Changes**

   Year-round closure appears to be valuable and should continue as recommended by D. George. The Subcommittee strongly recommends that the closure

recommended by D. George be implemented immediately. **Not implemented in winter 2003/2004.**
The Subcommittee supports expanding the Southern Exclosure in the breeding season north to Pole 6, as alluded to in D. George's recommendation. **Implemented**

OHV Division noted that it intends to pursue additional habitat enhancement activities in this vicinity. However, the Scientific Subcommittee had not reviewed these activities at the time of this Annual Report

2. **Oso Flaco—Recommendation Supported**

   No additional comments. **Implemented**

3. **Size of the Southern Exclosure—Recommendation Supported With Proposed Text Changes**

   The Subcommittee supports this recommendation (expanding the Southern Exclosure in the breeding season north to Pole 6). **Implemented**

4. **Monitoring**

   Retain skilled monitors—Recommendation Supported

   The Subcommittee agrees with the need to retain an adequate number of trained monitors with site-specific field experience at ODSVRA. To boost retention of monitors, the Park should pursue all opportunities to hire monitors under the ESI classification. **Implemented** Additionally, ODSVRA has an open position for an Assistant Ecologist. The Park should pursue all opportunities to fill this position. **Position not yet filled**

   a. **Continue banding Least Tern and Snowy Plover chicks—Recommendation Supported**

      No additional comments. **Implemented**

   b. **Additional monitoring of Least Tern juveniles to estimate fledging success—**
      Recommendation Supported

      The Subcommittee agrees that additional counts of adults and juveniles at dusk would be valuable. **Implemented**

5. **Improve Effectiveness of the Southern Exclosure Perimeter Fence—Recommendation Supported**

   No additional comments. **Generally implemented** with the exception of six-foot fencing, which was not feasible.

6. **Reduce Trespass Along the Southern Enclosure Shoreline—Recommendation Supported**

The Subcommittee agrees that efforts to reduce trespass in this area must be continued. **Implemented**

7. **10 ft. x 10 ft Enclosure with Net Top—Recommendation Supported**

   No additional comments. **Implemented as appropriate.** Such exclosures had to be removed when a snowy plover got tangled in the netting and died

8. **Necropsy**

   Necropsy reports should be included in the annual plover/tern nesting report as appendices so that the reader can evaluate the results. **Not implemented**

   One of the deaths was due to disease and therefore not reported. The January 2004 snowy plover mortality in the vicinity of 7.5 reveg. area was not reported in the annual report and the necropsy report was not provided, however this necropsy was discussed at length during the 2004 CCC review of the CDP and the necropsy reports were made available.

9. **Predator Control Program**

   The Subcommittee expressed support for ongoing implementation of the predator control program. **Implemented**

Other Research and Management Activities

The wintering shorebird and night riding studies are currently underway; however, at the time of this Annual Report, they were not yet available for their review. In addition, the OHV Division has also been conducting steelhead survey work on Arroyo Grande Creek[1]. This study was conducted for two primary purposes: 1) to evaluate the composition and significance of the fishery in Arroyo Grande Creek associated with State Park habitat, and 2) to gage the impact (if any) of SVRA vehicle traffic on these aquatic resources, especially in an area (beach) where vehicles traverse the wetted stream. The report included the following recommendations:

> *"In general, the primary objectives of this study were accomplished. However, additional or continued sampling may serve to identify the periodic presence of the aforementioned species in the future. Additional periodic fishery monitoring in this reach could provide additional useful information for resource managers, related to any future impacts from vehicle traffic that may arise. It is probably not necessary to continue the bimonthly frequency scheduled in 2004, but two to four surveys during 2005 may be sufficient to document significant progress in the reestablishment of the lower Arroyo Grande Creek fishery. Possible benefits of more frequent sampling should be reevaluated when the fishery in the study reach is restored to a significant degree towards its former quality."*

[1] See Attachment 6; Lower Arroyo Grande Creek and Lagoon Fishery and aquatic Resources Summary Monitoring Report, Dec. 2004

freshwater (from upstream) and marine (from ocean) species because of the normally-rich resources afforded by the lagoon environment."

The results of this study will be distributed to those TRT members, individuals and organizations who have expressed an interest in steelhead issues.

Concluding Remarks:

The next step for the TRT is to re-initiate a review of the research and management priorities as they relate to this coming 2005 nesting season. Accordingly, the TRT has scheduled a meeting for Friday, February 11, 2005 to discuss this issue as well as those issues dealing with last year's Scientific Subcommittee recommendation addressing management for habitat quality in the Southern Exclosure north to Pole 6. This concludes the 4th Annual Report of the TRT. Should you have any questions regarding its contents or conclusions, please feel free to contact me at your convenience

Sincerely,

John C. Jostes,
TRT Program Facilitator

JCJ/
cc: Paula Hartman
Andrew Zilke

Enclosures: *
Attachment 1: List of Current TRT Members and Alternates
Attachment 2: 2003 ODSVRA Day Use, camping and OHV Use Numbers
Attachment 3: ODSVRA Report on 2004 Breeding Season and Attachments
Attachment 4: Scientific Subcommittee Revised Recommendations on Western Snowy Plover/California Least Tern monitoring and management (Revised January 10, 2005).
Attachment 5: Information Regarding Predatory Management Project
Attachment 6: Lower Arroyo Grande creek and Lagoon Fishery and Aquatic resources Summary Monitoring Report
Attachment 7: TRT Meeting Notes from 1/13/04 and 12/14/04 meetings

* Attachments available for review at Feb. 16, 2005 Public Hearing, or by requesting copies from Commission staff.

CCC Exhibit 4
(page 8 of 8 pages)

"Future objectives should include an attempt to sample and observe fish that periodically may reside in the area subject to regular vehicle traffic. Practically, this should usually be limited to the surf-line outlet reach; however, the back-beach reach of the creek is dynamic and occasionally is outside the vehicle closure zone. There may be future opportunities to conduct observations of the behavior and fate of fish in trafficked areas, so the failed attempts to do so during 2004 should not deter this objective. Even in the absence of evidence of direct or indirect impacts attributable to vehicle traffic upon fish of any species, the closure zone should generally be aligned so as to include as much length and area of active streambed as reasonably possible, to the degree practicable and consistent with necessary Park operations."

"One purpose of this monitoring was to gage the degree to which high traffic volume in the SVRA (including vehicles fording the seasonal lagoon outlet) affects fish or their habitat; no significant vehicle impacts to fish or their habitat were observed. However, a seasonal vehicle closure of most of the back-beach reach was probably partly responsible for minimizing impacts. When allowed, vehicle traffic may disturb several common species' rearing habitat in the back-beach reach: staghorn sculpin, threespine stickleback, and striped mullet appear the species most likely subject to this periodic disturbance. In comparison, fish typically do not use the surf-line outlet reach, where vehicles most frequently and efficiently ford the stream. Furthermore, the quality of habitat in this lowest reach (sand banks, sandy channel) does not appear to be significantly altered by vehicle traffic, owing largely to the naturally transitory and dynamic nature of sandy features near the surf line and through the beach."

"It appears the most significant potential impact to the fishery, including sensitive species such as steelhead, relates to the seasonality of surface flow. Cessation of flow across the beach area (lagoon closure) is a frequent but not necessarily annual occurrence. Lagoon water quality usually degrades during closed periods, especially if inflow is low, and poor water quality and lack of access to and from the ocean can impact steelhead. Even more severe, complete loss of inflow to the lagoon has occurred over a dozen times since 1940, though less frequently (if at all) since completion of Lopez Dam in 1969 (Stetson Engineers et al. 2004). In 2004, severe dewatering was likely due to local agricultural groundwater pumping that exceeded the recharge available from the creek. Future dewatering of this reach of stream is to be expected; the degree to which the fishery reestablishes itself will likely depend upon the number of years between such disturbances. However, recolonization by fishes can be expected to occur by both

2004 Recommendations and Comments of the ODSVRA Scientific Subcommittee re: Western Snowy Plover and California Least Tern Monitoring and Management (revised *January 10, 2005*):

A. INTRODUCTION

The ODSVRA Scientific Subcommittee members discussed the 2004 ODSVRA plover/tern nesting report (*Nesting of the California Least Tern and Snowy Plover at Oceano Dunes State Vehicular Recreation Area, San Luis Obispo County, California 2004 Season*) at their November 22 meeting. Doug George, of PRBO Conservation Science, participated. The Scientific Subcommittee made the following introductory observations about the 2004 nesting season and efforts to manage plover and tern breeding at ODSVRA:

1. A substantial increase in the number of snowy plovers using the area.
2. Although only about 66 snowy plover chicks fledged, that number is about one chick per male, a goal of the Draft Recovery Plan.[1]
3. A tremendous amount of effort has been expended to make the program at ODSVRA successful.
4. Although the snowy plover fledge rate was down, looking at the big picture it was not a bad year.
5. Use of the Oso Flaco area increased.
6. The hatching success rate was very good.

The members' recommendations and comments on the 2004 ODSVRA plover/tern nesting report are provided in Section B of this report; background discussion is provided as needed. The Subcommitee also briefly discussed the impacts and value of nesting season monitoring, which is discussed in Section C. Section D lists the recommendations made by the Subcommittee in 2003 and describes whether each recommendation was implemented for the 2004 season. Finally, members of the Technical Review Team requested that the Subcommitee discuss and respond to questions raised by Jim Suty of Friends of Oceano Dunes (dated December 20, 2004). This discussion was held on January 4, 2005, and the response is provided in Section E.

B. 2004 PLOVER/TERN REPORT

The Subcommittee provided the following comments on the 2004 ODSVRA plover/tern nesting report. The report was not available early enough in advance of the meeting to allow most members to review it in detail. The group focused on specific areas of concern or interest, rather than going through each of the recommendations in order.

---

[1] In looking at Figure 3, it is interesting to note that up through mid-June, the fledge rate was about one chick per male. Starting around June 20, the fledge rate declined for undetermined reasons.

1. ODSVRA should request that the U.C. Santa Cruz Predatory Bird Research Group relocate its peregrine falcon hack site farther away from ODSVRA.

The U.C. Santa Cruz Predatory Bird Research Group (SCPBRG) manages a peregrine falcon release program (hack site) on Santa Rosa Road[2] between Buellton and Lompoc (see page 13 of Appendix H to the 2004 plover/tern report). Peregrine falcons can devastate breeding shorebirds, and have done so at some least tern sites. Two juvenile peregrine falcons that had been released from the hack site on Santa Rosa Road six weeks earlier appeared perched together on the west fence of the 7 exclosure. Although peregrine falcons are naturally occurring predators at ODSVRA, ODSVRA should request that SCPBRG consider moving its hack site farther away from plover and tern breeding sites. The fact that recently hacked juveniles showed up at ODSVRA exclosures strongly supports moving the hack site.

2. Support efforts to get more experienced USDA Wildlife Services personnel.

Wildlife Services typically sends very inexperienced personnel to do the predator removal work. Experience is critical to make predator management as effective and benign as possible. The Resource Ecologist is working to have Wildlife Services hire a biologist rather than someone at the aide level, which was the level provided in 2003 and 2004. It is much more expensive to hire a biologist. Resource Ecologist Laura Gardner is trying to work with adjacent landowners to see if resources can be pooled since the biologist could benefit recovery efforts throughout the Guadalupe-Nipomo Dunes population. For example, the 2004 Refuge results were not available at the time of this meeting, but the preliminary report was that the 2004 fledge rate was down largely due to predation.

3. Take down closed pole traps that are close enough to nesting exclosures such that they present a predation problem.

Pole traps not functioning as traps provide a perch for predators such as owls. Any such poles close enough to nesting areas to present a predation problem should come down when not in use.

4. Install a large exclosure of no-climb fencing at Oso Flaco.

In 2004, symbolic fencing was used from Oso Flaco Creek north to the southern boundary of the riding area as well as along the eastern side of the foredune area. Additionally, a two-acre exclosure was set up just north of Oso Flaco Creek in response to recommendations made last year to address high levels of predator activity. A large area should be enclosed by no-climb fence in 2004. Depending on what is feasible, perhaps the Boneyard Exclosure fencing could be extended down to the shoreline. Constraints will include the ability to fence and maintain such a large area and concerns about the closed area not being available for educational trips. Although the area could be symbolically fenced, an approach that does not seem to meet with as much public resistance, only the no-climb fence would keep out predators such as coyotes. Without extensive predator-proof fencing, it may be very difficult to encourage nesting in this non-riding area. By creating a more comparable situation to what occurs in the riding area, fencing the area would provide useful information about the suitability of the area for nesting. Such fencing

[2] This road is south of State Route 246.

should be considered experimental at this time and not tied to removing exclosures in the riding area.

5. Obtain more information as to what can be accomplished at Oso Flaco to provide better nesting habitat.

ODSVRA should obtain more information as to nest site characteristics at Oso Flaco to determine whether room really exists for more nests. While wholesale landscape alteration may not be possible, it may be possible to manipulate smaller areas to increase nesting suitability. Ideally, it would be useful to characterize the habitat where each nest is found (e.g., percent of vegetation and/or debris cover, vegetation height, surface topography, etc.) for a predetermined area around the nest and to see, if over time, there appears to be any correlation with nest success. Additionally, it would be useful to map Oso Flaco in terms of vegetation cover, surface topography, non-native vegetation, etc. This information would help to direct habitat management considerations (when appropriate) and monitor changes over time. Likewise, it would be useful to know whether ODSVRA plovers end up at the Refuge. Finding out the relative value of the riding area versus more natural areas would be of interest. The SSC understands that monitors may not necessarily be in a position to gather all of this data at this time.

6. Consider alternative approaches to least tern chick shelters.

The Subcommittee supports the tern chick shelter recommendation in the 2004 annual report with the following text change to the fourth sentence: "In addition to the wood slat shelters, consider other designs or ~~natural~~ materials that may provide some protective cover." Non-natural materials may prove more suitable. The least tern chick shelters that were placed in the exclosures were not used in 2004. Monitors did notice a gravitation of birds to the limited hummocks and other natural relief, e.g., near sea rocket. The shelter locations were recorded via GPS, but the data were not analyzed. Shelters were not deliberately put up near nests. Although bringing naturally occurring debris would be useful, limited time exists to do so. Some sites have had success with clay roofing tiles, but they tend to get buried quickly and often attract nesting rodents. Any testing with alternative chick shelters must be done using a formal experimental design with sufficient replication to enable a statistical test with reasonable power.

7. Implement the recommendation to band least tern chicks to brood.

Note that the method for calculating least tern numbers is just an index, and not a highly accurate number. Biologists may need a more accurate method to calculate numbers. Banding to brood would assist with testing accuracy of methodology.

8. Brief comments:

a. Note that an error exists in the second paragraph of the summary. The sentence "In addition, of the 35 abandoned nests, 8 were depredated, ..." should be corrected. In 2004, 35 total nests were recorded as lost, with 16 recorded as abandoned.

C. IMPACTS OF NESTING SEASON MONITORING

The Subcommittee noted that a researcher may be writing a paper on this very subject, but long-term data show that sites with the most monitoring tend to be the most successful. The

permitting process and other controls tend to weed out monitors that may otherwise cause unnecessary disturbance or other adverse impacts. Monitors are able to spot predators and other problems. For example, ODSVRA is one of the top five producers of snowy plover chicks. The least tern production at ODSVRA is occurring at such a high rate that the area could become a source population for other locations.

D. REVIEW OF IMPLEMENTATION OF SCIENTIFIC SUBCOMMITTEE RECOMMENDATIONS MADE IN DECEMBER 2003

The Scientific Subcommittee reviewed the 2003 ODSVRA plover/tern nesting report authored by Doug George of PRBO Conservation Science and made recommendations based upon that report (2003 Recommendations of the ODSVRA Scientific Subcommittee re: Western Snowy Plover and California Least Tern Monitoring and Management, December 30, 2003). Subsequent to its November 2004 meeting, a Subcommittee requested that ODSVRA ecologist Laura Gardner review the December 2003 list of recommendations to assess implementation. This section lists the December 2003 recommendations and whether each recommendation was implemented. Numbering is consistent with the December 2003 report.

1. Management for Habitat Quality in the Southern Exclosure—Recommendation Supported With Proposed Text Changes

Year-round closure appears to be valuable and should continue as recommended by D. George. The Subcommittee strongly recommends that the closure recommended by D. George be implemented immediately. ***Not implemented in winter 2003/2004.***

The Subcommittee supports expanding the Southern Exclosure in the breeding season north to Pole 6, as alluded to in D. George's recommendation. ***Implemented***

2. Oso Flaco—Recommendation Supported

No additional comments. ***Implemented***

3. Size of the Southern Exclosure—Recommendation Supported With Proposed Text Changes

The Subcommittee supports this recommendation (expanding the Southern Exclosure in the breeding season north to Pole 6). ***Implemented***

4. Monitoring

a. *Retain skilled monitors*—Recommendation Supported

The Subcommittee agrees with the need to retain an adequate number of trained monitors with site-specific field experience at ODSVRA. To boost retention of monitors, the Park should pursue all opportunities to hire monitors under the ESI classification. ***Implemented*** Additionally, ODSVRA has an open position for an Assistant Ecologist. The Park should pursue all opportunities to fill this position. ***Position not yet filled.***

b. *Continue banding Least Tern and Snowy Plover chicks*—Recommendation Supported

No additional comments. ***Implemented***

Exhibit 5
page 4 of 7 pages)

c. ***Additional monitoring of Least Tern juveniles to estimate fledging success*—Recommendation Supported**

The Subcommittee agrees that additional counts of adults and juveniles at dusk would be valuable. ***Implemented***

5. Improve Effectiveness of the Southern Exclosure Perimeter Fence—Recommendation Supported

No additional comments. ***Generally implemented with the exception of six-foot fencing, which was not feasible.***

6. Reduce Trespass Along the Southern Exclosure Shoreline—Recommendation Supported

The Subcommittee agrees that efforts to reduce trespass in this area must be continued. ***Implemented***

7. 10 ft. x 10 ft Exclosure with Net Top—Recommendation Supported

No additional comments. ***Implemented as appropriate.*** *Such exclosures had to be removed when a snowy plover got tangled in the netting and died.*

8. Necropsy

Necropsy reports should be included in the annual plover/tern nesting report as appendices so that the reader can evaluate the results. ***Not implemented.*** *January 2004 snowy plover mortality in the vicinity of 7.5 reveg area was not reported in the annual report and the necropsy report was not provided.*

9. Predator Control Program

The Subcommittee expressed support for ongoing implementation of the predator control program. ***Implemented***

E. RESPONSE TO FRIENDS OF OCEANO DUNES QUESTIONS DATED DECEMBER 20, 2004

1. Based on the data collected during the past several years (ref Fig 1, 2, & 3), predation appears to be the largest threat to listed species at Oceano Dunes. Does the SSC recommend that more emphasis should be placed on predator management at Oceano Dunes and the surrounding areas (like the NWR) to ensure predators do not continue to eat and scare off species?

Predation will always be an issue to address at ODSVRA, but it is only one of several management issues affecting plovers and terns. Predator management is thus part of the overall management effort.

The Park is already engaged in an intensive predator control program. Fencing off a large portion of Oso Flaco, which will be implemented in 2005, is a significant increase in the predator control effort. It is unclear whether even more predator control is appropriate at this time. Biologically, it would not be desirable nor feasible to eliminate all predators. What may be

needed is not substantially more predator control, but rather more efficient predator control. Adequately paid, year-round professionals would be preferable to the seasonal personnel currently used. It is also possible that predator control could be more cost effective, but predator control must remain flexible and able to respond to whatever threats manifest themselves.

Regarding the efforts of neighboring landowners, such as the Refuge, ODSVRA cannot guarantee what will be done at other sites. Regardless of actions taken at those sites, ODSVRA has its own obligations to implement management measures at ODSVRA to address impacts from the kind of activities that occur at ODSVRA. The same types and levels of use do not occur on neighboring lands.

2. The 2004 data (confirmed by discussions at the December TRT meeting) indicate that the success at the Oso Flaco area is due to several factors: (1) the removal of non-native plant species (ice plant); (2) the erection of more fences to deter predators, and (3) the addition of resource personnel to monitor the area. Based on this success, is it likely that even greater success would result if the entire Oso Flaco area was closed during the plover breeding season to allow for more extensive development of habitat and to encourage overall nest and fledgling success?

Contrary to what is stated in the question, the Park has not documented the effect of removing ice plant at Oso Flaco. While Oso Flaco breeding success is improving, it remains below that of the seasonal riding exclosure. The greatly expanded exclosure proposed for Oso Flaco in 2005 will be a significant attempt to improve the potential for nesting success. The Park proposes to fence the area directly south of the 7/8 exclosure and north of the boardwalk, including the shoreline, with no-climb fencing (the same as used for the riding area). The exclosure would be roughly 50 acres and close off about ¼ mile of beach. Extensive exotic plant removal will be implemented. The fence will be farther away from the creek than in 2004, which should aid in predator avoidance. In 2004, only approximately four acres were exclosed with no-climb fencing, and the closure did not include the wrack/shoreline.

As discussed at the TRT meeting, ODSVRA managers have determined that closing off the entire Oso Flaco area is not appropriate. Furthermore, it is important to note that even if nesting success increases at Oso Flaco, it does not mean that birds will move out of the riding area.

3. If you overlay the 2004 nest success onto the nest location pictures provided in the 2004 report (ref Fig 4, 5, 6, 7) one can see where known predation has occurred and where nest abandonment and unviable eggs are located. By reviewing sitings of predators, predator nest locations and where predators were trapped or killed, it appears that predators can use the Pipeline Reveg area as a corridor to the exclosures (ref Fig 7). Predators use the vegetation for cover and safe travel. Thus, to make it more difficult for predators to gain access to exclosures, shouldn't Parks allow a greater separation of the Pipeline Reveg corridor from the exclosures or even reduce the Pipeline Reveg? Would allowing OHV recreation to the east of the exclosures, like in 2002, help deter some predation?

The Pipeline Revegetation area is one area from which shrikes have been removed, but contrary to the assertion in the question, no clear pattern is evident showing that the Pipeline Revegetation area is a predator problem. The current closure depth provides the buffer needed from riders (terns were observed taking flight every time vehicles passed within a certain distance), plus it gives a greater movement corridor for nesting plovers and terns.

The number of nests shown as abandoned or failed is misleading in that it does not only show nests that failed due to predation. For example, the figure includes nests with unviable eggs (e.g., #28) even where those nests successfully hatched chicks. The figure also does not account for the fledge rate. The Subcommittee recommends that the 2004 report be revised to include a map that shows nest outcome.

If the vegetation at the Pipeline Revegetation area is deemed a predation problem, then possibly Oso Flaco will prove even more of a problem.

4. The 7.5 reveg island has shown via the data to be used by predators and it has had higher predation than areas to the North where there is not as much vegetation (ref Fig 8). Doesn't this indicate that removal of the 7.5 reveg area would benefit listed species at the ODSVRA?

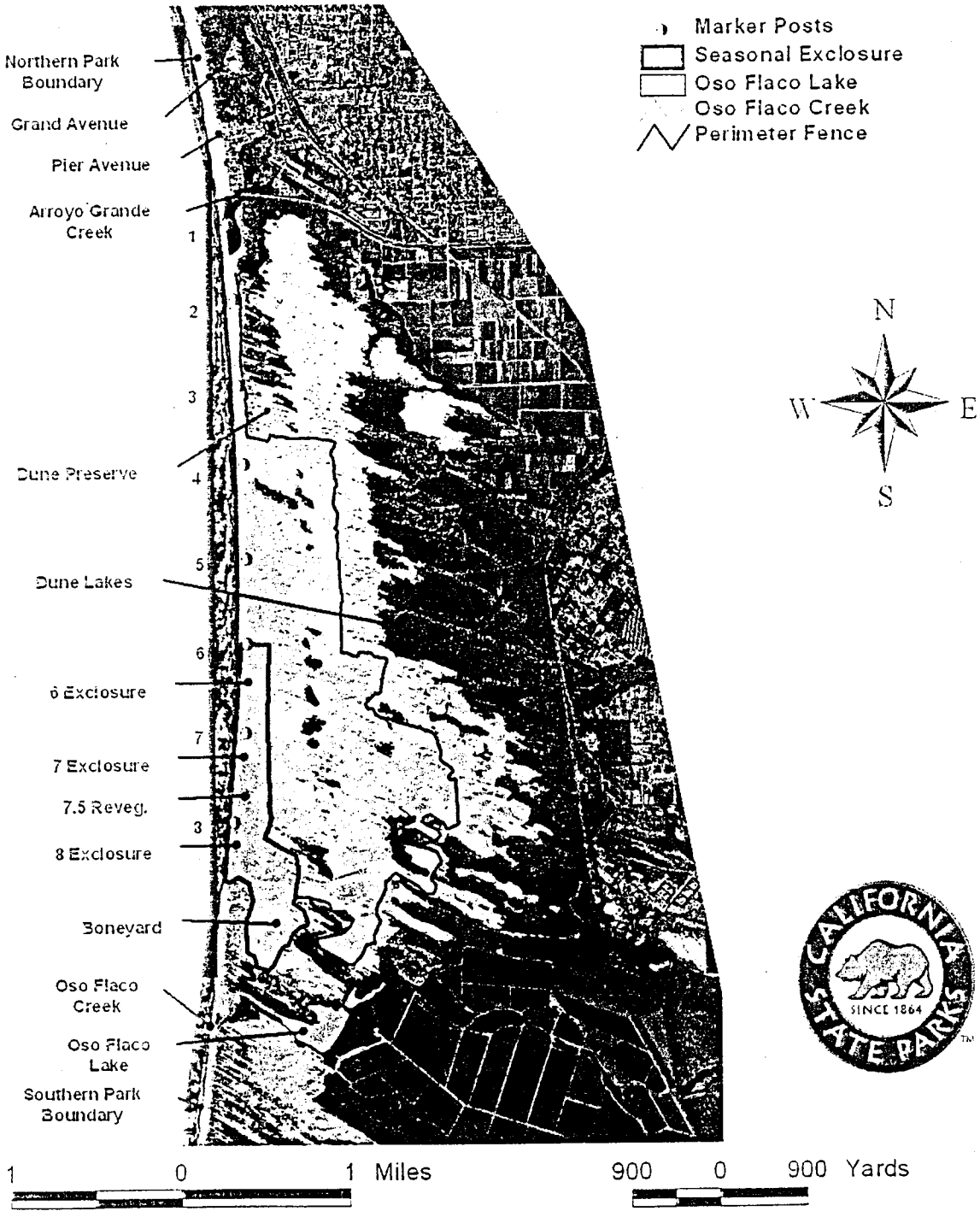
Please note that Figure 8 was not provided.

Contrary to the assertion in the question, the 7.5 Revegetation Area is successfully used by breeding plovers and terns. No data shows that the area is detrimental, and no evidence suggests that it is a focal point for predators. Any predator that does find the area is quickly targeted by predator managers. Additionally, the area tends to have fewer nests lost to sand burial than the surrounding riding area. Plovers are also drawn to the area in the winter, so it has year-round plover habitat value. The aerial photo clearly shows microtopography (e.g., hummocks, vegetation) within 7.5 Reveg. that is distinct from the surrounding riding area. It is important to note that the area is not densely vegetated.

Based on anecdotal evidence, the site appears to be an asset for breeding at ODSVRA. One of its most important functions may be for brood cover. Unfortunately, analyzing the site's specific use and success rate is difficult. There is little data to show how the birds use the site because monitors try to limit entry into the area to reduce disturbance, which could drive broods out. Also, chicks entering the area tend to disappear visually (which is good) and are thus hard to monitor. Since so little data exists about which broods use 7.5 Reveg., it is difficult to compare it to other sites. Thus, biologists can determine nest fate within 7.5 Reveg. but not overall breeding success since monitors do not know which broods use it.

Since the anecdotal evidence suggests the area is beneficial, ODSVRA should attempt to collect more data to understand the area's role. Perhaps the Park could randomly pick two sites for comparison. One site would include plovers and terns nesting within or adjacent to 7.5 Reveg., and the other site would include only plover and tern nests without ready access to the site. Monitors would need to determine which broods actually use 7.5 Reveg. Routine documentation of winter roost sites would also be helpful.

Figure 6. ODSVRA site map.



CDP 4-82-300-A5
Annual Review
Exhibit 6
(Page 1 of 1 pages)
Park Map