

COASTAL CONSERVANCY

Staff Recommendation
February 14, 2013

SEA OTTER RECOVERY 2012/2013 GRANTS

Project No. 08-079-03
Project Manager: Trish Chapman

RECOMMENDED ACTION: Consideration and possible authorization to grant the University of California at Santa Cruz and Davis up to \$120,975 to implement three projects focused on the recovery of the southern sea otter.

LOCATION: Nearshore waters from southern San Mateo County to northern Santa Barbara County

PROGRAM CATEGORY: Integrated Coastal and Marine Resources

EXHIBITS

Exhibit 1: [Project Location and Site Map](#)

Exhibit 2: [Project Letters](#)

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Section 31220 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of up to one hundred twenty thousand nine hundred seventy-five dollars (\$120,975) to the Regents of the University of California for projects to further the recovery of the southern sea otter as follows:

- Regents of the University of California, Santa Cruz (UCSC): Seventy one thousand three hundred sixty four dollars (\$71,364) to: 1) assess use of Elkhorn Slough by southern sea otters in order to identify opportunities to conserve and restore suitable otter habitat; and 2) to conduct a public education program regarding the recovery of southern sea otters.
- Regents of the University of California, Davis (UCD): Forty nine thousand, six hundred eleven dollars (\$49,611) to assess southern sea otter mortality patterns and identify key causes of premature mortality.

Prior to the disbursement of funds each grantee shall submit for the review and written approval of the Executive Officer of the Conservancy a work program, including scope of work, budget and schedule; and the names and qualifications of any contractors to be employed in carrying out the project.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the current Project Selection Criteria and Guidelines.
2. The proposed authorization is consistent with the purposes and objectives of Chapter 5.5 of Division 21 of the Public Resources Code, regarding Coastal and Marine Resource Protection.”

PROJECT SUMMARY:

The proposed authorization would provide funding to the University of California, Santa Cruz (UCSC) and the University of California, Davis (UCD) to undertake three separate efforts to aid the recovery of the southern sea otter.

Southern sea otters (*Enhydra lutris nereis*,) currently inhabit near-shore marine environments from San Mateo to Santa Barbara Counties. They were hunted to near extinction in the early part of the 20th century, and listed as a federally threatened species in 1977. The population currently numbers between 2,000 and 2,700 animals, far below the historic levels estimated at approximately 16,000 animals. In recent years, multiple organizations have undertaken studies to better understand otter population dynamics and the causes of early mortality and low birth rates.

In 2012, Conservancy staff met with a variety of stakeholders, including staff of the California Department of Fish and Wildlife, focused on recovery of southern sea otters to identify priorities for use of the funds generated from the voluntary tax check-off for sea otter recovery.

Subsequently, the Conservancy solicited project proposals to address these sea otter priorities. The recommended grants would fund the three highest-rated proposals as described below.

A team led by scientists at UCSC would research how sea otters use the estuarine habitats of Elkhorn Slough and investigate otter feeding habits, prey availability and contamination. This information would have several purposes. With an understanding of how otters benefit from, or are impacted by in the slough environment, future restoration projects could incorporate components that enhance or increase high quality otter habitat. In addition, water quality regulations (Total Daily Maximum Loads) are currently being developed for Elkhorn Slough and its source tributaries, and these could be informed by knowledge of contaminant effects on otters in the estuary. Currently, too little is known about estuarine habitat use by otters to allow restoration and regulatory strategies to be designed and implemented to support sea otter needs.

The second effort, led by UCD, would expand on an landmark epidemiological study conducted in 2003 of 105 dead sea otters collected from 1998-2001 that provided critical information about impacts of coastal contamination on sea otters. The new effort would expand on this study and incorporate more complete diagnostic testing to provide a broader understanding of sea otter disease processes. Data from approximately 600 otters would be included in this study. By completing tests for exposure to common pathogens and toxins for all enrolled animals, researchers can pinpoint high-risk areas for exposure and also begin to tease apart potential synergistic effects.

Finally, UCSC in coordination with the Friends of the Sea Otter will continue efforts to inform the public, including policy makers and regulators, about the status of sea otters, their habitat, and research needed to manage problems plaguing the population. This is seen as a critical component of the overall recovery strategy. The proposed project will include three primary public outreach tools: 1) a comprehensive professionally run website, seaotters.com, providing news, reports and other content from the Sea Otter Alliance (SOA) as well as stories coming from the public and other sources; 2) continuation of Sea Otter Awareness Week (SOAW), and 3) provision of a Spanish/English brochure about sea otters to schools, the general public and marine resource users.

Researchers from UCSC and UCD have been integrally involved in efforts to recover southern sea otter populations and helped form the Sea Otter Alliance, a partnership of state and federal agencies, research institutions, and community organizations focused on sea otter recovery. Both institutions have partnered on previous recovery efforts with a range of stakeholders, including Friends of the Sea Otter, the Department of Fish and Game (now Fish and Wildlife), the U.S. Geological Survey, and the Monterey Bay Aquarium. Both UCSC and UCD are highly qualified to lead the proposed efforts.

Site Description: Although historically ranging from Oregon to Baja, southern sea otters are currently found only from Pt. Conception in Santa Barbara County to just below Half Moon Bay in San Mateo County. Inhabiting rocky, sandy, and mixed shores, they are most common in near shore areas with large kelp beds. They are generally found in water depths of sixty-five feet or less, facilitating foraging along the ocean floor.

Project History: In the 1700s, sea otters ranged from Baja California along the west coast of the United States into Alaska and around the Pacific to the eastern coast of Russia and down into Japanese waters. Relentlessly hunted for their luxuriant fur, by the early 1900's southern sea otters (those previously found from Baja California to the Pacific Northwest) were believed extinct. In 1938, about fifty animals were unexpectedly discovered along the Big Sur coast.

In 1972, Congress passed the Marine Mammal Protection Act prohibiting the taking of any protected marine mammal, including the southern sea otter. In 1977, the animal was placed on the federal endangered species list as a threatened species, and in 1982, the U.S. Fish & Wildlife Service released a sea otter recovery plan. At that time, resource managers predicated that the southern sea otter population would rebound to about 13,000 animals. Throughout the 1980s and early 90s, the population grew at a healthy rate of about five to seven percent a year and by the mid-1990s population levels had reached about 2,000 animals. Shortly thereafter, however, managers noted a worrisome slow-down in population growth, and in more recent years, no growth at all.

Concerns about stagnation of the sea otter population prompted environmental groups to lobby for legislation to address this problem. In 2006, the California legislature passed AB 2485 which focuses on sea otter mortality. Among other provisions, this bill prohibits the disposal of substances known or believed to have deleterious effects on fish, plant life, mammals or bird life in state waters. (Fish and Game Code sec. 5650(a)(6)). Additionally, the bill established the California sea otter tax check-off fund (see Project Financing below) to allow taxpayers to contribute to funding solutions to this problem.

Since 2008, the Conservancy has provided just over \$600,000 of sea otter tax check-off funds for studies to better understand the causes of high mortality and low birth rate in southern sea otters.

PROJECT FINANCING

Coastal Conservancy

\$120,975

The anticipated source of Conservancy funds for this project is an appropriation from the California Sea Otter Fund. Established in 2006, the California Sea Otter Fund is an income tax check-off program allowing taxpayers to dedicate funds to facilitate sea otter recovery. (Revenue and Taxation Code §18751) The funds may be used for “research, science, protection projects or programs related to the Federal Sea Otter Recovery Plan or improving the nearshore ocean ecosystem, including, but not limited to, program activities to reduce sea otter mortality.” (RTC §18754.2(a)(3)). The proposed authorization is consistent with the requirements of the California Sea Otter Fund in that funds will be used to further understanding of sea otter habitat use and mortality patterns in order to guide future recovery efforts. The public education grant will further the recommendations of the revised Federal southern sea otter Recovery Plan (2003), Objective 7 (develop and implement a public education and outreach program). Section 18754.2(b) requires the Conservancy to solicit available federal, private, matching, and other dollars to maximize or leverage funds benefitting sea otters. UCD and its partners will provide approximately \$308,908 in-kind staff and laboratory resources. UCSC will also provide in-kind staff assistance.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

This project would be undertaken consistent with Division 21, Chapter 5.5 (Coastal and Marine Resources) of the Conservancy’s enabling legislation (Public Resources Code § 31220).

Under Section 31220 of the Public Resources Code, the Conservancy may undertake water quality and living marine resource protection projects that meet any of the objectives specified in subsection (b) of that section. Section 31220(b)(5) states that the Conservancy may undertake a project that “[p]rovides for monitoring and mapping of coastal currents, marine habitats, and marine wildlife, in order to facilitate the protection and enhancement of resources within the coastal zone. A project considered under this paragraph shall be implemented in consultation with the Department of Fish and Game.” Consistent with this section, the proposed project will provide for monitoring of southern sea otter to facilitate their protection and enhancement within the coastal zone. The Department of Fish and Game has been consulted with regard to this project, as required by Section 31220(b)(5). The project addresses a marine species and thus is not directly addressed in local watershed management plans. Conservancy staff has consulted with the State Water Resources Control Board in the development of this project in order to ensure consistency with the Clean Beaches Program under Chapter 3 of Division 20.4 of the Public Resources Code.

**CONSISTENCY WITH CONSERVANCY'S 2007
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 5, Objective H** of the Conservancy's 2013-2018 Strategic Plan, the proposed authorization will result in the three projects that will contribute to sea otter recovery.

**CONSISTENCY WITH CONSERVANCY'S
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on November 10, 2011, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** The proposed research is supported by U.S. Fish and Wildlife Service, the U.S. Geological Survey, the California Department of Fish and Game, the Monterey Bay Aquarium, and the State Water Quality Control Board (See Exhibit 2).
4. **Location:** The proposed projects would be located within the coastal zone of San Mateo, Santa Cruz, Monterey, San Luis Obispo and Santa Barbara Counties.
5. **Need:** Funds for this project will be derived from monies appropriated to the Conservancy from the Sea Otter Recovery Fund. On their own, UCSC and UCD do not have sufficient funds to undertake this study.
6. **Greater-than-local interest:** The southern sea otter is a federally-listed threatened species. Like all threatened and endangered species, the otter's recovery is of great significance, both from a biological and cultural perspective. As a sentinel species in the food chain, the sea otter is a measure of the entire marine ecosystem. Thus, sea otter recovery is an important component of marine resource restoration and protection overall. Additionally, because of its preferred habitat in near shore kelp beds, and its habit of feeding on the surface of the water, the sea otter is highly visible from the shore. Wildlife viewing opportunities such as this attract millions of tourists. The southern sea otter exhibit at the Monterey Bay Aquarium is one of the most popular in the facility, revealing the high level of public interest in this animal.
7. **Sea level rise vulnerability:** The proposed research and education components of the project will not be affected by sea level rise considerations.

Additional Criteria

8. **Leverage:** See the "Project Financing" section above.
9. **Readiness:** UCSC and UCD are ready to move forward with this study immediately.

10. **Cooperation:** This project is a cooperative effort between many resource agencies and organizations focusing on sea otter health and recovery.
11. **Minimization of greenhouse gas emissions:** The proposed authorization is not expected to have any long-term green house gas emissions. The project has the potential to generate short-term greenhouse gas emissions associated with vehicles used by commuting research workers, but these emissions would be limited, and not cumulatively significant.

COMPLIANCE WITH CEQA:

The proposed project is categorically exempt from review under the California Environmental Quality Act (CEQA) pursuant to 14 California Code of Regulations § 15306, which exempts basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious major disturbance to an environmental resource as part of a study leading to an action which the Conservancy has not yet approved, adopted or funded. This project will not result in a major disturbance to sea otters as only dead sea otters will be handled for the UCD study. The USSC study will involve only observational studies of sea otter behavior and educational activities. Upon approval, staff will file a Notice of Exemption for the project.