

COASTAL CONSERVANCY

Amended Staff Recommendation
December 1, 2016

SEA OTTER RECOVERY GRANTS 2017

Project No. 08-079-06
Project Manager: Trish Chapman

RECOMMENDED ACTION: Authorization to provide up to \$117,800 to the Friends of the Sea Otter and the Elkhorn Slough Foundation to implement two separate projects to aid in 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 Map](#)

Exhibit 2: [California Sea Otter Fund - Summary of Projects](#)

Exhibit 3: [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 seventeen thousand eight hundred dollars (\$117,800) to implement projects focused on the recovery of the southern sea otter, specifically as follows, to the:

- Friends of the Sea Otter: sixty-two thousand dollars (\$62,000) to reduce sea otter disturbance through a public education campaign on responsible viewing of wild sea otters.
- Elkhorn Slough Foundation: fifty-five thousand eight hundred dollars (\$55,800) to undertake additional analyses and monitoring of sea otter use of Elkhorn Slough.

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 authorization is consistent with Chapter 5.5 of Division 21 of the Public Resources Code, regarding Integrated Coastal and Marine Resource Protection.
 2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
 3. The Elkhorn Slough Foundation and the Friends of the Sea Otter are both nonprofit organizations existing under section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code.”
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PROJECT SUMMARY:

The proposed authorization would provide funding to the Friends of the Sea Otter (FSO) and Elkhorn Slough Foundation (ESF) to undertake separate projects to aid the recovery of the southern sea otter. The two projects involve public education to reduce stress on otters induced by interactions with humans and advancing the understanding of sea otter use of Elkhorn Slough and the potential for colonization of other estuaries.

The southern sea otter (*Enhydra lutris nereis*,) is an ecologically important species that faces numerous challenges, from disease and shark bite mortality to resource limitation in large portions of its occupied range. Southern sea otters were hunted to near extinction in the early part of the 20th century, and listed as a federally threatened species in 1977. Currently the population numbers around 2,900 animals inhabiting the near-shore marine environments adjacent to San Mateo County south to Santa Barbara County. This is far less than the historic levels estimated at approximately 16,000 animals with a range along the entire California coast and south into Baja California.

To address this decline, taxpayers can voluntarily contribute to the California Sea Otter Recovery Tax Fund, of which the Conservancy receives approximately half the proceeds for expenditure on projects which will assist in the recovery of sea otters. In July 2016, the Conservancy solicited project proposals aimed at recovery of the southern sea otter. This solicitation was posted on the Conservancy’s website and emailed to multiple organizations involved with sea otter recovery efforts in California. The Conservancy received two proposals and staff recommends funding the two projects described below.

“Be Otter Savvy” Program. FSO will reduce stress on otters through continued implementation of the Be Otter Savvy Program, which the Conservancy also funded in 2015. This is an education program aimed at promoting responsible viewing of wild sea otters. California’s sea otter population has been slowly recovering from near-extinction since cessation of the maritime fur trade. During this time, California’s coastal human population has undergone a many-fold increase. As a result, southern sea otters are coming increasingly into contact with humans, especially in harbors and estuaries, where the charismatic species is a primary attraction for ecotourists. Recent research on the energy expenditures of reproductive female sea otters has

demonstrated that individuals in this stage are physiologically challenged, suggesting that repeated disturbance can be harmful to sea otters by depleting their critical energy reserves. In extreme cases, the additional stress caused by human disturbance may lead to pup abandonment or even death. Wildlife tour operators, kayakers, photographers, and other marine recreationists often approach too closely, causing the repeated disturbance of sea otters throughout the day.

The goal of the “Be Sea Otter Savvy” program is to reduce sea otter disturbance by inspiring responsible viewing of wild sea otters. The program will accomplish this goal by engaging and educating the wildlife-viewing public through a variety of tools. Specific strategies that will be pursued as part of the proposed project include:

- Increase distribution of decals designed for placement on rental kayaks and stand-up paddleboards that explain safe otter-viewing behavior.
- Develop educational signage regarding safe-otter viewing and install signs at private-boat launch facilities.
- Continue and expand the Be Otter Savvy outreach program through social media, public presentations, workshops, and other avenues.

FSO aims to reduce the frequency of disturbance to sea otters that results from the proximity and behavior of marine recreation and wildlife viewing activities by at least 25% relative to the previous year by the end of the grant period.

Sea Otter Use of Elkhorn Slough. Over the past three years, the Elkhorn Slough Foundation, in collaboration with UC Santa Cruz, volunteers and others have undertaken an intensive research effort to examine sea otter use of estuarine habitats in Elkhorn Slough and otter effects on estuarine resources. ESF will capitalize on this effort by expanding the analysis of data collected over the last three years and integrating data from a recently completed study of macrobenthic invertebrates (i.e. clams, snails, etc.) in the slough. This analysis will help researchers better understand how large a sea otter population can be sustained in Elkhorn Slough and to predict the potential carrying capacity of other estuaries. The work in Elkhorn Slough will also involve a continuation of the otter monitoring effort. Data from the past three years has shown that the otter population is still increasing but likely nearing its carrying capacity. This provides a unique opportunity for researchers to observe the process of establishing an equilibrium population after colonization of a new area. The information from both these efforts will be very valuable in planning for sea otter colonization of other estuaries.

Site Description: Southern sea otters historically ranged from Oregon to Baja, but 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.

The Be Otter Savvy program began with a focus on areas with a high frequency of disturbance reports (as recorded by the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife (CDFW)), including the Cannery Row area of Monterey, Moss Landing, San Simeon, Morro Bay, and Port San Luis. Outreach efforts will continue in these areas but the program will expand throughout the range of the otters to establish comprehensive outreach to marine

recreation businesses, and collaborate with groups working on marine wildlife conservation education.

Elkhorn Slough, a National Estuarine Research Reserve, is regarded as critically important habitat for marine and nearshore wildlife on California's Central Coast. The slough, including Moss Landing Harbor, has the highest concentration of southern sea otters on the California coast with counts exceeding 100 animals. They can be found in open water or hauled out on the mudflats in the main slough channel, from Moss Landing harbor to Hudson Landing. Males are most common in the North harbor area. Groups of sea otter mothers and pups are more commonly found further in the slough where the protected waters provide both food sources and refuge.

Project History: In 1972, Congress passed the Marine Mammal Protection Act prohibiting the take of protected marine mammals in U.S. waters, 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. Concerns about slow pace of sea otter recovery 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 established the California sea otter tax check-off fund (see Project Financing below). Fifty percent of the funds (after administration costs taken by the Controller and Franchise Tax Board) may be used by the Conservancy for sea otter-related projects as described in the Financing section below. The remaining 50% is provided to the Department of Fish and Wildlife for sea otter-related purposes.

Since 2008, the Conservancy has provided over \$1.1 million of sea otter tax check-off (Exhibit 2) funds for projects to aid in the recovery of southern sea otters. Conservancy staff have worked closely with the Sea Otter Alliance, a multi-agency partnership focused on sea otter recovery, and other stakeholders to identify high priorities for tax-check off funding. Projects funded to date include a multi-year study to examine the effects of contaminants and human-caused stressors on central coast sea otter populations. This study found that overall food availability was the most significant limiting factor on sea otter populations leading to lower rates of successful reproduction. A high density of female otters and pups have been observed in Elkhorn Slough in the past decade and it is believed that the warmer waters and haul out spots allow otters in the slough to reduce their food intake needs. A study of sea otters in Elkhorn Slough investigated otter feeding habits, prey availability and contamination, and the findings will be used to inform future restoration efforts at the slough. The Conservancy is also funding researchers at UCD to update a landmark epidemiological study about impacts of coastal contamination on sea otters in order to pinpoint high-risk areas for exposure. Early findings from this study identified microcystin, a freshwater toxic algae, as a cause of otter deaths and linked them to drainage from Pinto Lake in Watsonville. As a result of this, the Conservancy funded a project in 2014 to help reduce microcystin levels in Pinto Lake. The projects recommended for funding this year build off of the research from previous years.

PROJECT FINANCING

Coastal Conservancy	\$117,800
Elkhorn Slough Foundation	\$17,750

Project Total

\$135,550

The anticipated source of Conservancy funds for these projects 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 (RTC) Section 18754). 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 Section 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 the following objectives of the Final Revised Federal Southern Sea Otter Recovery Plan (2003):

- 4.3.6 Implement all reasonable and prudent measures to minimize factors causing stress or disease in the southern sea otter population.
- 4.4 Evaluate the potential for habitat-related differences in growth rates between populations of sea otters.
- 7 Develop and implement a public education and outreach program.

RTC Section 18754.2(b) requires the Conservancy to solicit available federal, private, matching, and other dollars to maximize or leverage funds benefitting sea otters. In addition to the funding shown above, the Elkhorn Slough Foundation estimates that approximately \$67,779 of in-kind services from volunteer monitoring will be provided to the project. In total, ESF and FSO will contribute over \$85,000 towards the two projects.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

These projects are 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)(7) states that the Conservancy may undertake a project that “[r]educes the impact of population and economic pressures on coastal and marine resources.” The proposed projects would reduce stress on sea otters by reducing conflicts between otters and humans and would also undertake research to aide in future conservation of ocean ecosystems in which otters are a keystone species.

CONSISTENCY WITH CONSERVANCY’S 2013 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S), AS REVISED JUNE 25, 2015:

Consistent with Goal 5, Objective H, the proposed authorization will result in two grants that will support the recovery of the southern sea otter.

**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 October 2, 2014, 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. **Promotion and implementation of state plans and policies:** The proposed projects would advance the objectives of the U.S. Fish and Wildlife Service (USFWS) 2003 Final Revised Recovery Plan for the Southern Sea Otter (see "Project Financing" section). Under the terms of a 1991 cooperative agreement between the California Department of Fish and Wildlife and USFWS, the State will assist in pursuing the objectives of federal recovery plans.
4. **Support of the public:** The proposed projects are supported by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Monterey Bay Aquarium, California State Parks, and the National Oceanic and Atmospheric Administration.
5. **Location:** The proposed projects would be undertaken within the coastal zone of San Mateo, Santa Cruz, Monterey, San Luis Obispo and Santa Barbara Counties.
6. **Need:** Funds for this project will be derived from monies appropriated to the Conservancy from the Sea Otter Recovery Fund. On their own, the proposed grantees do not have sufficient funds to undertake these projects.
7. **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 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.
8. **Sea level rise vulnerability:** The proposed projects will not be affected by sea level rise considerations.

Additional Criteria

9. **Leverage:** See the "Project Financing" section above.
10. **Readiness:** The proposed grantees are ready to move forward with this study immediately.
11. **Minimization of greenhouse gas emissions:** The proposed authorization is not expected to have any long-term greenhouse gas emissions. The project has the potential to generate short-

term greenhouse gas emissions associated with vehicles used to conduct outreach and research efforts.

COMPLIANCE WITH CEQA:

The Be Otter Savvy educational campaign is exempt from review under the California Environmental Quality Act (CEQA). Section 15322 of the CEQA Guidelines exempts the “adoption, alteration, or termination of educational or training programs which involve no physical alteration in the area affected. Examples provided by the exemption include the development of, or changes in curriculum or training methods. (Title 14 California Code of Regulations (CCR) Section 15322(a)). Implementation of the outreach effort and public education campaign concerning responsible viewing of wild sea otters as described in this staff recommendation does not involve the physical alteration of the environment.

The proposed research project at Elkhorn Slough is exempt from CEQA review pursuant to Title 14 CCR Section 15306 (Information Collection). Section 15306 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. The project Elkhorn Slough will involve only observational studies of sea otter behavior.

Upon approval, staff will file a Notice of Exemption for the Elkhorn Slough project.