

COASTAL CONSERVANCY

Staff Recommendation

November 19, 2020

SEA OTTER RECOVERY GRANTS 2021

Project No. 08-079-10

Project Manager: Hilary Walecka/Maggie Jenkins

RECOMMENDED ACTION: Authorization to disburse up to \$79,750 to Monterey Bay Aquarium to implement a project to aid in recovery of the southern sea otter, consisting of raising and releasing up to three stranded pups using captive female otters as surrogates, and analyzing and circulating best practices for sea otter surrogacy.

LOCATION: Monterey, Monterey County and Morro Bay, San Luis Obispo County

PROGRAM CATEGORY: Integrated Coastal and Marine Resources

EXHIBITS

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

Exhibit 2: [Southern Sea Otter 2019 Population Trend and Range](#)

Exhibit 3: [California Sea Otter Fund – Summary of Projects](#)

Exhibit 4: [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 an amount not to exceed seventy-nine thousand seven hundred fifty dollars (\$79,750) to Monterey Bay Aquarium

to implement one project to assist in the recovery of the southern sea otter, specifically as follows: Monterey Bay Aquarium will raise and release up to three stranded sea otter pups to Morro Bay using captive female sea otters as surrogate mothers, and will analyze and circulate best practices for raising sea otter pups by surrogacy.

Prior to commencement, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
2. Names and qualifications of any contractors to be retained in carrying out the project.
3. A plan for acknowledgement of Conservancy funding.
4. Evidence that all permits and approvals required to implement the project have been obtained.”

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 Monterey Bay Aquarium is a nonprofit organization organized under section 501(c)(3) of the U.S. Internal Revenue Code.”
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PROJECT SUMMARY:

Staff recommends that the Conservancy disburse \$79,750 to the Monterey Bay Aquarium to undertake a project to aid the recovery of the southern sea otter. The project consists of raising up to three stranded sea otter pups and releasing them to Morro Bay over the course of a year, using captive female sea otters as surrogate mothers. The project includes continued documentation and assessment of the Aquarium otter surrogacy program’s performance in order to analyze best practices for raising sea otter pups by surrogacy. In addition, in this project the Aquarium will train partner institutions that are beginning sea otter surrogacy programs on these techniques and best practices.

The southern sea otter is an ecologically important species that has been listed on the Endangered Species List as a threatened species since 1977, having been hunted to near extinction for its fur. Historically estimated at 16,000-20,000 animals with a range along the entire California coast and south into Baja California, the southern sea otter population has been slow to recover. Today the population numbers around 2,960 animals inhabiting a range from San Mateo County south to Santa Barbara County, a fraction of their historic range.

To address this slow recovery, taxpayers can voluntarily contribute to the California Sea Otter Recovery Tax Fund, of which the Conservancy receives approximately half the proceeds to support projects that will assist in the recovery of sea otters. In July 2020, the Conservancy solicited project proposals aimed at recovery of the southern sea otter. The Conservancy received four proposals, and staff recommends funding the following proposal:

Monterey Bay Aquarium's Surrogacy to Expand the Southern Sea Otter Population. Monterey Bay Aquarium will rescue and rehabilitate three stranded sea otter pups through their innovative surrogacy program and release those pups to Morro Bay. In addition, the Monterey Bay Aquarium will analyze and share information on best practices for surrogate-raising and rehabilitation of sea otter pups to increase capacity for this recovery technique at other partner institutions.

Over the past 20 years, the Monterey Bay Aquarium has been successfully using an innovative surrogacy approach that pairs stranded pups with surrogate adult female captive sea otters who raise the pups for 6-8 months until the juvenile is completely weaned and can be released back into the wild. Through this method, pups are able to learn foraging and socialization skills from their surrogate mothers. This method also ensures the pups do not form attachments to humans, which can be problematic when released into the wild. Monterey Bay Aquarium's surrogacy program has contributed to the successful recolonization of Elkhorn Slough and has significantly advanced sea otter population recovery. Over half of the increase in sea otter population observed in central California from 2002-2016 is attributed to otters raised through the surrogacy program and the offspring they produced in the wild.

Monterey Bay Aquarium will continue the success of its surrogacy program beyond the Elkhorn Slough area by releasing otters in Morro Bay. Elkhorn Slough's otter population has shown signs it is reaching its carrying capacity whereas Morro Bay has a lower population density of otters and thus has more potential to support additional otters. Estuaries have the potential to play a significant role in sea otter recovery as they provide easy access to abundant food-supplies, haul out areas to rest and raise their pups, and refugia from predators, including white sharks which are currently the leading cause of death for sea otters. Sea otters also benefit salt marsh and sea grass ecosystems in estuaries through their role as a keystone species and top predator, restoring food webs and providing resiliency from nutrient pollution, algal blooms, and eroding salt marsh shorelines.

Monterey Bay Aquarium has begun preliminary work surrogate-rearing several pups and releasing them in Morro Bay. This project will continue this work to enable the Aquarium to rescue, rehabilitate, and release three additional otters in Morro Bay over the course of a year, which will help to increase otter population numbers in that area. The Monterey Bay Aquarium program operates under permits from U.S. Fish and Wildlife Service (USFWS) that authorizes the rescue, rehabilitation, and release of southern sea otters. Through this project, Monterey Bay Aquarium will also document and assess what factors lead to successful surrogacy and release over the past 20 years, in order to improve protocols. This information will lead to continued success of sea otter recovery in Morro Bay, as well as potential future efforts in other locations outside of their current range that could further advance sea otter population

recovery. As part of this project, the Monterey Bay Aquarium will also train partner institutions that are developing sea otter surrogacy programs on these techniques and best practices.

Site Description: Monterey Bay Aquarium will rehabilitate and raise stranded sea otter pups at its facilities in Monterey on Cannery Row. There, Monterey Bay Aquarium has facilities such as tanks and veterinary equipment and trained staff to rehabilitate otter pups. The rehabilitated animals will be released in Morro Bay, a protected estuary along the Central Coast in San Luis Obispo County that has an existing population of sea otters. Exact locations for release are determined in accordance with the Monterey Bay Aquariums' permit from USFWS for Rescue, Rehabilitation, and Release of Stranded Marine Animals.

Southern sea otters are most commonly found in kelp beds in the nearshore environment, and over the last 20 years have also been found to thrive in salt marshes and eelgrass beds in estuaries. They are generally found in water depths of sixty-five feet or less, facilitating foraging along the ocean floor. Their historic range is from Oregon to Baja, but they currently inhabit only from San Mateo County to Santa Barbara County.

Grantee Qualifications: Monterey Bay Aquarium has worked for over 35 years helping to restore the sea otter population, including leading the live-stranding network and conducting important research on the health and natural history of the species. Monterey Bay Aquarium is uniquely positioned to carry out this project as they are the sole organization rescuing and rearing stranded sea otters and have significant expertise performing this work. The Aquarium has successfully managed state and federal grants and has an annual budget supported by donors and foundations who are inspired to support the sea otter program based on their record of success.

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 southern sea otter was placed on the federal endangered species list as a threatened species. In 1982, the USFWS released a sea otter recovery plan. The threshold for southern sea otters to be considered for de-listing from the federal endangered species list is when the population exceeds 3,090 individuals for three consecutive years. This was achieved from 2016-2018. The population slightly declined each year throughout this term but remained above the 3,090 individual threshold. Currently, the USFWS is conducting a full analysis pursuant to the criteria of the Federal Endangered Species Act to determine if threats to the species have been sufficiently ameliorated to warrant delisting.

Results from last year's (2019) sea otter population count have revealed the population has dropped to 2,962 individuals, below the threshold, and unfortunately the 2020 census was canceled due to the COVID-19 pandemic. The reduction in the sea otter population is consistent with observations of elevated shark-bite mortality in the northern and southern regions of the otter's range. In addition to its small population size and limited range, the sea otter population in California is vulnerable to devastation due to the threat of petroleum spills, infectious disease, human-caused pollutants and disturbance, and shark bites.

In 2006, the California legislature passed AB 2485 after concerns about the slow pace of sea otter recovery prompted environmental groups to lobby for legislation to address this problem. Among other provisions, this bill established the California sea otter tax check-off fund. Fifty percent of the funds (after administration costs taken by the Controller and Franchise Tax Board) is directed to the Conservancy for sea otter-related projects, as described in the Financing section below. The remaining 50% is directed to the Department of Fish and Wildlife for sea otter-related purposes.

Since 2008, the Conservancy has provided over \$1.4 million of sea otter tax check-off funds for projects to aid in the recovery of southern sea otters. Conservancy staff has 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 critical research for sea otter recovery, education, and reduction of environmental stressors impacting sea otters (Exhibit 3), and the projects recommended for funding this year build on the sea otter recovery research programs from previous years.

PROJECT FINANCING

Coastal Conservancy	\$79,750
US Fish and Wildlife Service	\$100,000
Project Total	\$179,750

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 “Final Revised Federal Southern Sea Otter Recovery Plan” (2003) states that “[t]he primary objectives of this recovery plan are to create the conditions that will allow the southern sea otter to increase in numbers and distribution and to identify appropriate conservation actions to address the threats to this species”. The proposed authorization is consistent with the requirements of the California Sea Otter Fund in that funds will be used to further the objectives of the Final Revised Federal Southern Sea Otter Recovery Plan (2003). Monterey Bay Aquarium’s project will help to advance the Federal Recovery Plan for the Southern Sea Otter by increasing southern sea otter populations in the wild through rehabilitation and surrogate-rearing of stranded sea otter pups that can be rescued and subsequently released to the wild.

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. For the Monterey Bay Aquarium project, matching funds have been awarded by USFWS Prescott Marine Mammal Rescue Assistance grant (\$100,000). In addition, in-kind contributions will be provided by 50

volunteers that support staff in the recovery, care, release, and monitoring of surrogate-raised pups.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed project is consistent with Division 21, Chapter 5.5 (Integrated Coastal and Marine Resources Protection) of the Conservancy’s enabling legislation (Public Resources Code § 31220). Under Section 31220 of the Public Resources Code, the Conservancy may undertake living marine resource protection and restoration projects in order to improve and protect coastal and marine water quality and habitats. As keystone predators, sea otters have been shown to benefit a variety of coastal and marine habitats including kelp forests, salt marsh, and sea grass ecosystems. The proposed project advances sea otter recovery and facilitates returning this keystone predator back to coastal and marine ecosystems.

Section 31220 states that a project must meet any of the objectives specified in subsection (b) of that section. Consistent with Section 31220(b)(7), the proposed projects “[r]educes the impact of population and economic pressures on coastal and marine resources.” The proposed project would reduce stress on sea otters by allowing otters to populate less populated areas of the coast through rehabilitation and release. Consistent with Section 31220(c), the proposed project includes a monitoring and evaluation component.

CONSISTENCY WITH CONSERVANCY’S [2018-2022 STRATEGIC PLAN](#) GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6, Objective H** of the Conservancy’s 2018-2022 Strategic Plan, the proposed project will result in one project 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 project will advance the objectives of the USFWS 2003 Final Revised Recovery Plan for the Southern Sea Otter (see “Project Financing” section).

4. **Support of the public:** Support for the project comes from California State Senator William Monning and California State Assembly member Mark Stone (Exhibit 4).
5. **Location:** The Monterey Bay Aquarium's proposed project will be located within the coastal zone of Monterey, Monterey County and Morro Bay, San Luis Obispo County.
6. **Need:** On their own, the proposed grantee does not have sufficient funds to undertake this project. Due to the Covid-19 pandemic, the Monterey Bay Aquarium faces a projected loss of \$45 million and needs additional support for its important sea otter surrogacy program.
7. **Greater-than-local interest:** The proposed project will aid in the recovery of the southern sea otter, an endangered, charismatic, and keystone species.
8. **Sea level rise vulnerability:** The proposed project is not subject to impacts from sea level rise.

Additional Criteria

9. **Resolution of more than one issue:** Recovery of sea otter populations have been shown to also improve the health and resilience of coastal and marine ecosystems including kelp forests, salt marsh, and sea grass habitats due to the sea otter's role as a top predator and keystone species.
10. **Leverage:** See the "Project Financing" section above.
11. **Readiness:** The Monterey Bay Aquarium is ready to move forward with the project immediately.
12. **Cooperation:** These projects can move forward because of the cooperation between Monterey Bay Aquarium, USFWS, and California Department of Fish and Wildlife.

CEQA COMPLIANCE:

The Monterey Bay Aquarium project to rescue, rehabilitate, and release stranded pups into the wild is exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Title 14 California Code of Regulations (CCR) section 15301 (Existing Facilities), because it is a continuation of an ongoing program, which will operate in its existing facility without expansion of existing use. The Monterey Bay Aquarium has operated its sea otter surrogacy program, permitted by USFWS, for over 20 years.

Upon approval of the project, Conservancy staff will file a Notice of Exemption.