

COASTAL CONSERVANCY

Staff Recommendation
December 4, 2008

SANTA CRUZ ISLAND HABITAT RESTORATION

File No. 08-133-01
Project Managers: Rachel Couch/Janet Diehl

RECOMMENDED ACTION: Authorization to disburse up to \$538,000 to The Nature Conservancy to restore natural habitat, eradicate invasive species, and prevent the introduction of new invasive species on Santa Cruz Island, one of the Channel Islands off the coast of Santa Barbara and Ventura counties.

LOCATION: Santa Cruz Island, Channel Islands National Park (unincorporated Santa Barbara County) (Exhibit 1)

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

- Exhibit 1: [Project Location Map](#)
 - Exhibit 2: [Site Maps](#)
 - Exhibit 3: [Santa Cruz Island Flora and Fauna](#)
 - Exhibit 4: [Project Photos \(Harbor and Trail\)](#)
 - Exhibit 5: [Aerial Photo \(Channel Islands\)](#)
 - Exhibit 6: [Project Photo \(Santa Cruz Island Fox Pup\)](#)
 - Exhibit 7: [Project Letters](#)
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RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251 - 31270 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed \$538,000 (five hundred thirty-eight thousand dollars) to The Nature Conservancy to restore natural habitat, and work towards eradicating invasive species and preventing the introduction of new invasive species on Santa Cruz Island, one of the Channel Islands off the coast of Santa Barbara and Ventura counties. This authorization is subject to the condition that, prior to the disbursement of any funds, The Nature Conservancy shall submit for the review and approval of

the Executive Officer of the Conservancy a work program, schedule, budget and the names of any subcontractors to be employed to carry 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 6 of Division 21 of the Public Resources Code regarding the enhancement of coastal resources.
3. The Nature Conservancy is a nonprofit organization existing under Section 501(c)(3) of the U.S. Internal Revenue Code, with purposes consistent with Division 21 of the Public Resources Code. ”

PROJECT SUMMARY:

With this proposed grant, The Nature Conservancy (TNC) will take the next step in one of the most ambitious ecological restoration efforts in the state – the eradication of invasive species and restoration of natural habitat throughout the 62,000-acre Santa Cruz Island. Since it acquired most of the island 30 years ago, TNC has worked in coordination with the National Park Service to restore the island’s threatened and endangered species to viability. The first phase of the project, in which TNC removed feral sheep, cattle and pigs from the island and replaced golden eagles with bald eagles, has been completed. As a result, the island’s famous endangered fox population is on the rebound. Now TNC seeks Conservancy assistance for the second phase of its work: habitat enhancement projects that will abate the chronic, critical threat to island habitat posed by non-native plant species. The proposed project also will address the threat posed by a new invader to the island – the Argentine ant – and will include new educational materials and signs to ensure that the visiting public does not inadvertently add to the problem by bringing new non-natives onto the island.

Historical over-grazing by sheep and considerable soil and habitat disturbance by feral pigs has led to severe habitat degradation and adverse effects on native species island-wide. Oak seedlings have been routed up and destroyed, shrublands have been gnawed away to grasslands, and weeds have proliferated. Invasive plants compete for resources with native species and alter the quality of wildlife habitat. TNC aims to tip the balance back in favor of native species by removing key introduced invasive organisms and preventing the establishment of future non-native and invasive plants and animals. To accomplish this TNC proposes to conduct an island-wide All Taxa Biological Inventory (ATBI), collate past research and monitoring reports and conduct gap analysis of information needs.

This work will help to carry out the draft Island Fox Recovery Plan (USFWS 2006), which mandates that Santa Cruz Island managers “restore island native ecosystem integrity in a manner that enhances island fox recovery while protecting other listed and sensitive species.” The plan calls for the enhancement of “native ecosystem elements and processes that have been lost or compromised as a result of anthropogenic activities.” In addition, it recommends that managers provide “sufficient ecosystem services for foxes, such as hunting habitat, resting habitat, [and]

protective cover.” Research suggests that foxes inhabiting grasslands dominated by invasive species have lower reproductive rates than those inhabiting other habitat types. Restoring the native vegetation on Santa Cruz Island will provide increased cover for foxes, and may increase fox productivity.

To prepare for this phase of the project, TNC developed an island-wide weed map and a weed treatment and management plan, with support from the California Wildlife Conservation Board (WCB). The map and plan have enabled TNC project managers to prioritize which species to eradicate. They began weed eradication treatment this year, using a small helicopter to reach rugged remote areas of the island, and also began to test different methods of restoration, re-establishing native plants in former agricultural lands currently dominated by annual grasses and fennel. TNC is collecting local, native seed and growing plants for restoration activities in their nursery. These plants will be used to restore and enhance priority sites.

Other project elements include:

- Removal of invasive, non-native plants and trees and restoration of the watershed ecosystem in the Cañada del Puerto watershed and Prisoners Harbor coastal wetland;
- Development of an Incipient Invasive Species Prevention and Rapid Response Plan, to address new invasive species as soon as they appear;
- Installing signs and distributing brochures to the visiting public, to caution them against inadvertently spreading new invasions of non-native plants and animals; and
- Developing interpretive signs for the Coastal Trail from Prisoners Harbor to Pelican Bay.

Conservancy staff has been working closely with TNC over the past year to identify priority restoration projects on Santa Cruz Island proposed for Conservancy funding. A map displaying the proposed project sites is attached to this staff recommendation as Exhibit 2, and some photos of the proposed project elements comprise Exhibit 3. Photos showing public access sites at Coches Prietos Anchorage and the trail above Prisoners Harbor are included as Exhibit 4.

TNC is contributing about \$1.5 million of its own funds to this phase of the proposed project, and has raised another \$1.5 million from WCB, the National Park Service and the U.S. Fish and Wildlife Service. Costs for the initial phases of the project (2000 – 2008) totaled \$19 million (see “Project Financing” section, below). The proposed Conservancy grant would represent 15% of the currently proposed phase of the project, and about 2% of the funds thus far spent to restore habitat on Santa Cruz Island.

TNC is uniquely qualified to carry out this project. It owns 76% of the island and has a cooperative agreement with the National Park Service, which owns the remaining 24%, to manage the island as one ecological unit. TNC has raised millions of dollars in support of restoration projects on Santa Cruz Island, has successfully managed the previous phases of this project, and has ample qualified staff to carry out the proposed tasks.

TNC will continue to share the research, eradication strategies and invasive species prevention, early detection, rapid response plan developed on Santa Cruz Island with ecologists worldwide. Results of earlier phases of the project have been translated and used in places as far away as the Galapagos Islands.

Site Description:

Santa Cruz Island lies 22 miles off the coast of Santa Barbara County and is the largest island in Channel Islands National Park. It is 22 miles long, and measures from two to six miles across, for a total of 61,972 acres (Exhibit 5, aerial photo.) Two parallel mountain ranges more than 2,000 feet high create a major central valley, with steep canyons that descend off rugged peaks to the coast.

The island is the most biologically diverse of the eight southern California Channel Islands and is home to 12 endemic species. Four terrestrial vertebrates are endemic to Santa Cruz Island: the Santa Cruz Island Fox (*Urocyon littoralis santacruzae*); the Santa Cruz Island Scrub Jay (*Aphelcoma coerulescens insularis*); the Santa Cruz Island Harvest Mouse (*Reithrodontomys megalotis santacruzae*); and the Santa Cruz Island Deer Mouse (*Peromyscus maniculatus santacruzae*). The Island Spotted Skunk (*Spilogale gracilis amphialus*) is endemic to several Channel Islands.

Because the island is so big and its physiography is so diverse, it hosts several vegetation communities, including Bishop pine forest, oak woodland, riparian woodland, chaparral, coastal sage scrub, valley and foothill grassland, coastal bluff, coastal marsh, and beach and dune systems. Santa Cruz Island hosts the largest vascular flora of the Channel Islands: 650 species, 74% of which (480 taxa) are native. Eight plants are endemic to Santa Cruz Island. Eight plant species found on Santa Cruz Island are federally listed as endangered, and one is listed as threatened.

There are very few structures on Santa Cruz Island today. On the 24% of the island owned by the National Park Service, improvements include several trails, two public campgrounds, a dock at Prisoners Harbor and Scorpion Harbor, one ranger station and a small U.S. Navy facility. The remaining 76% of the island, owned by TNC, includes the historic main ranch complex, another set of ranch buildings known as Christy Ranch, the University of California field station, researcher cabins, two airstrips, and a small native plant nursery. A few dirt roads traverse the island.

The habitat for native species on the island, most notably the listed plants and animals, has been fundamentally altered by historical land use. For much of the past two centuries, sheep, cattle and pigs scoured the landscape, causing widespread devastation of the island ecosystem. By the end of the 20th century, the impact of feral pigs was likened to that of an oil spill, demanding nothing short of emergency intervention and response. Ungulates ate island plants that evolved without secondary chemical compounds to deter grazers. This caused widespread, severe soil erosion and landscape destabilization, and promoted the conversion of shrubland into non-native annual grasslands. Although sheep and cattle were removed in the late 20th century, and pigs were gone by 2007, their impacts on the island remain.

Non-native invasive plant species are the most problematic threat on the island today. As of 1995, 170 non-native plant species were recorded on Santa Cruz Island.

Project History:

Upon acquiring a portion of the island in 1978, TNC began an ambitious, decades-long restoration project. Since 2000, TNC has invested over \$8 million to carry out phases of the restoration project focusing on island fox recovery and removal of feral ungulates (sheep, cattle

and pigs). Federal and state agencies –the National Park Service, the U.S. Fish and Wildlife Service, the California Department of Fish and Game and the Wildlife Conservation Board – have contributed more than \$11 million to island restoration efforts.

In the course of TNC’s work – in March of 2004 – the federal government listed the Santa Cruz Island Fox and three other Channel Island fox subspecies as endangered, due to dramatic declines observed on Santa Cruz, Santa Rosa, San Miguel, and Santa Catalina Islands. Since that time, TNC and other agencies have taken steps to slow the decline and promote the survival of these unique subspecies. On Santa Cruz Island, TNC initiated a wild fox monitoring program and supports an on-island captive breeding program (Exhibit 6, fox pup being inspected by vet).

Other successfully completed elements of the restoration project include:

- eradication of close to 40,000 feral sheep and 5,000 feral pigs from the island;
- removal of feral cattle and feral horses from the island;
- eradication of the European honey bee (which can out-compete a wide array of native pollinators such as native bees);
- re-establishment on the island of the bald eagle, which had been extirpated by off-shore pesticide contamination of its marine prey, and
- capture and relocation of all nesting golden eagles from the island, which has brought about a reduction in predation-related mortality of the island fox.

With this work completed, TNC approached Coastal Conservancy staff in 2007 for assistance with the next phase of its restoration project – the eradication of non-native plant species and prevention of introduction of new invasive species. (See “Project Description” section, above.)

PROJECT FINANCING:

Current Phase (2008-2009)

Coastal Conservancy	\$538,000
The Nature Conservancy	\$1,527,671
CA Wildlife Conservation Board	\$1,077,978
National Park Service	\$295,300
U.S. Fish and Wildlife Service	<u>\$133,770</u>
Total Project Cost, Current Phase:	\$3,572,719

Completed Phases (2000-2007)

The Nature Conservancy <small>(does not include TNC salaries or overhead)</small>	\$8,243,063
CA Department of Fish and Game	\$484,622
National Park Service	\$9,694,687
U.S. Fish and Wildlife Service	<u>\$532,771</u>
Total Project Cost, Completed Phases:	\$18,955,143
TOTAL PROJECT COST (2000-2009)	\$22,527,862

The anticipated source of funds will be the fiscal year 07/08 appropriation of the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84) for Conservancy state-wide resource protection projects, which can be used for the protection of land and water resources consistent with Chapter 6 of Division 21 of the Public Resources Code. Consistent with this Chapter, the project involves restoration of coastal habitat and watersheds and eradication of non-native species.

This project is appropriate for prioritization under the criteria set forth in Section 75071 because the project includes non-state matching funds and will protect and improve habitat in the Cañada del Puerto watershed.

For the portion of the proposed project that involves educating the public using the property, the anticipated source of Conservancy funds is the fiscal year 07/08 appropriation from the Conservancy's Coastal Access Account and California Beach and Coastal Enhancement Account, established in the California Environmental License Plate Fund. Use of these funds is appropriate for this activity because a component of the proposed project will develop and install informational signage and brochures for the public, to ensure that public access to the island can be continued without contributing to the introduction of or spread of invasive plants and animals.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project would be undertaken pursuant to Chapter 6 (Sections 31251-31270) of the Conservancy's enabling legislation, Division 21 of the Public Resources Code, regarding coastal resource enhancement projects.

Consistent with Section 31251, the proposed project is a grant to a nonprofit organization for the purpose of enhancement of coastal resources that, because of human-induced events, have suffered loss of natural values. Consistent with this section, the project would fund corrective measures to enhance the natural and scenic character of the area.

Section 31252 states that all areas proposed for resource enhancement shall be identified in a certified local coastal plan or program as requiring public action to resolve existing or potential resource protection problems. Santa Cruz Island is not included in Santa Barbara County's Local Coastal Plan, but is an Area of Deferred Certification. The proposed project is consistent with the Coastal Act, as described in the "Consistency with the Coastal Act Policies" section below.

Consistent with Section 31253, staff has determined the recommended amount of funding by evaluating the total amount of funding available to the Conservancy for coastal resource enhancement projects, the fiscal resources of the applicant, the urgency of the project relative to other eligible similar projects, and the application of other factors prescribed by the Conservancy for the purpose of determining project eligibility and priority.

Consistent with Section 31255, TNC has submitted this proposed resource enhancement project for consideration by the Conservancy.

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

Consistent with **Goal 3, Objective C** of the Conservancy's 2007 Strategic Plan, the proposed project will result in the design and installation of several interpretive displays to educate the public visiting Santa Cruz Island on foot and by sea on how to avoid introducing and spreading invasive species.

Consistent with **Goal 5, Objective B** of the Conservancy's 2007 Strategic Plan, the proposed project will result in the restoration of hundreds of acres of coastal habitat.

Consistent with **Goal 5, Objective D** of the Conservancy's 2007 Strategic Plan, the proposed project will implement a project to eradicate non-native species and prevent further introduction of non-native species.

**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 September 20, 2007, 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 project has the support of many public agencies and nonprofit organizations, including: the National Park Service, the U.S. Fish and Wildlife Service; the California Department of Fish and Game; the Wildlife Conservation Board; the University of California's Natural Reserve System; the California Invasive Plant Species Council; the Santa Barbara Botanic Garden, and more. (See Exhibit 7, Project Letters).
4. **Location:** The proposed project is located within the coastal zone of Santa Barbara County.
5. **Need:** Funding from the Conservancy is essential for the project to proceed. TNC already has committed significant funding to acquire the property and complete the first phase of the project. Other state and federal agencies also have contributed millions of dollars. The Conservancy is the last significant source of funding needed to implement this phase of restoration.
6. **Greater-than-local interest:** As part of the Channel Islands National Park, Santa Cruz Island receives more than 100,000 visitors per year, from all parts of the country and from abroad. In addition, the species-recovery work that TNC is doing on Santa Cruz Island has been used a model for resource projects around the world.

Additional Criteria

7. **Urgency:** The timing of the proposed project is critical. Any delay in invasive plant eradication work means the problem spreads. With the island-wide weed map completed, TNC is positioned to begin work now. Additionally, the sooner the educational signs go up, the sooner the visitors to the island can be taught to avoid bringing new invasive species to the island.
8. **Resolution of more than one issue:** By including educational signs and brochures for the visiting public, the proposed project addresses both public access and habitat protection.
9. **Leverage:** See the “Project Financing” section above.
11. **Innovation:** The Invasive Species Prevention and Rapid Response Plan that TNC proposes to develop with the National Park Service is an innovative element of this project. TNC has a good track record of sharing its restoration experiments and techniques with the environmental community worldwide.
12. **Readiness:** TNC has raised all necessary matching funds and is ready to begin work upon Conservancy approval of the proposed grant.
15. **Cooperation:** TNC has a cooperative agreement with the National Park Service to manage Santa Cruz Island as one ecological unit. Other agencies contributing funds to and cooperating with this project include the Wildlife Conservation Board, the Department of Fish and Game, the University of California and the U.S. Fish and Wildlife Service.

CONSISTENCY WITH COASTAL ACT POLICIES:

The Channel Islands are considered an Area of Deferred Certification under Santa Barbara County’s Local Coastal Plan (LCP). As such, no LCP policies apply to the proposed project site. Because the proposed project aims to restore and enhance native plant habitat, it is consistent with the basic goal of the Coastal Act as stated in Section 30001.5(a) of the Public Resources Code: “to protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.” Specifically, the proposed project is consistent with Public Resources Code Section 30240(a), which states that “Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values. . . .”

COMPLIANCE WITH CEQA:

The proposed project is exempt from review under the California Environmental Quality Act (CEQA, Public Resources Code Section 21000 *et seq.*)

Portions of this project involving the collection of data and the development of plans to eradicate invasive species are statutorily exempt from the provisions of CEQA pursuant to 14 Cal. Code of Regulations Section 15262 because they involve only feasibility and planning studies for possible future actions which have yet to be approved or adopted. As required by this section, environmental factors will be considered in the plans. Additionally, basic data collection and resource evaluation activities that do not result in a serious or major disturbance to an

environmental resource are categorically exempt from the provisions of CEQA pursuant to 14 Cal. Code of Regulations Section 15306.

A portion of the project involves removal of non-native vegetation in the Cañada del Puerto watershed and Prisoners' Harbor coastal wetland. This project element is categorically exempt from the provisions of CEQA pursuant to 14 Cal. Code of Regulations Section 15304 because the project involves only minor alterations in the condition of land, water and/or vegetation which do not involve removal of mature, scenic trees. The area in which the non-native vegetation will be removed and natives will be planted has been officially designated a wildlife management area by several agencies, including the National Park Service and the U.S. Fish and Wildlife Service, which specifically qualifies the project for exemption from CEQA under 14 Cal. Code of Regulations Section 15304(d).

This project does not include the funding of any construction activities. The public education element of the project, however, may involve the development and installation of informational signs at popular anchorages at the island, such as Prisoners Harbor, Pelican Bay and Coches Prietos Anchorage. These on-premise signs would be accessory to or appurtenant to existing commercial, industrial or institutional facilities, which qualifies this element of the proposed project for categorical exemption from CEQA consideration under 14 Cal. Code of Regulations Section 15311(a).

Staff will file a Notice of Exemption upon approval of the action.