

# COASTAL CONSERVANCY

Staff Recommendation  
June 4, 2009

## INVASIVE SPARTINA PROJECT

99-054-01  
Project Manager: Maxene Spellman

**RECOMMENDED ACTION:** If the Conservancy is awarded up to \$1,734,522 from the National Oceanic and Atmospheric Administration under the American Recovery and Reinvestment Act of 2009, authorization to accept and disburse the funds for 2009 planning and management and ongoing treatment through 2010 to implement the Invasive *Spartina* Project Control Program within the San Francisco Estuary.

**LOCATION:** The baylands and lower creek channels of the nine counties that bound the San Francisco Bay.

**PROGRAM CATEGORY:** San Francisco Bay Area Conservancy

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### EXHIBITS

- Exhibit 1: [September 25, 2003 Staff Recommendation](#)
- Exhibit 2: [June 16, 2005 Staff Recommendation](#)
- Exhibit 3: [April 24, 2008 Staff Recommendation](#)
- Exhibit 4: [April 2, 2009 Staff Recommendation](#)
- Exhibit 5: [May 24, 2007 Staff Recommendation](#)

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### RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Chapter 4.5 of Division 21 of the Public Resources Code:

“If the State Coastal Conservancy is awarded grant funds by the National Oceanic and Atmospheric Administration under the American Recovery and Reinvestment Act of 2009 (the “ARRA grant funds”), the State Coastal Conservancy hereby authorizes the following:

1. Acceptance of up to \$1,734,522 (one million seven hundred thirty-four thousand five hundred twenty-two dollars) in ARRA grant funds to implement management and monitoring, and treatment and eradication projects for the Invasive *Spartina* Project (ISP) Control Program.
2. Disbursement of up to \$500,000 (five hundred thousand dollars) of the ARRA grant funds for ongoing invasive *Spartina* treatment and eradication projects through 2010 (or

subsequent), The ARRA grant funds for treatment and eradication projects may be used to augment existing grants to the California Wildlife Foundation, Friends of Corte Madera Creek Watershed, the East Bay Regional Park District, City of Alameda, City of San Leandro, the City of Palo Alto, the San Mateo County Mosquito Abatement and Vector Control District, the Alameda County Flood Control and Water Conservation District, the California Department of Parks and Recreation. Any grant of funds for treatment and eradication shall be subject to the following conditions:

- a. Prior to implementing any treatment and eradication project and prior to disbursement of any funds to the grantee, the grantee shall submit for review and approval of the Executive Officer a plan detailing the site-specific work for 2009 and 2010, based on the outcome and extent of the 2009 treatment, and including a list of identified mitigation measures, a work program for 2009 and 2010 treatment and 2011 activities, if applicable, including a schedule and budget, and evidence that the grantee has obtained all necessary permits and approvals for the project.
  - b. In carrying out any treatment and eradication project, the grantee shall comply with all applicable mitigation and monitoring measures that are set forth in the approved site-specific plan, that are required by any permit, the amended Biological Opinion or approval for the project, and that are identified in the "Final Programmatic Environmental Impact Statement/Environmental Impact Report, San Francisco Estuary Invasive *Spartina* Project: *Spartina* Control Program" (FEIS/R), adopted by the Conservancy on September 25, 2003.
  - c. The grantee shall comply with all requirements, conditions and terms related to the receipt and expenditure of ARRA grant funds.
3. Disbursement of up to \$1,093,197 (one million ninety-three thousand one hundred ninety-seven dollars) for planning and management for the ISP Control Program.

If the ARRA grant funds awarded by NOAA are less than \$1,734,522 (one million seven hundred thirty-four thousand five hundred twenty-two dollars), the Conservancy delegates to the Executive Officer the authority to determine the allocation of the ARRA grant funds, consistent with the terms of the ARRA grant and applicable law."

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. Disbursement of additional funds for the ISP Control Program treatment and eradication projects, and planning and management, remains consistent with Public Resources Code Sections 31160-31165 and with the resolutions, finding and discussion accompanying the Conservancy authorizations of September 25, 2003, June 16, 2005, April 24, 2008, and April 2, 2009 as shown in the staff recommendations attached as Exhibits 1 through 4 of the accompanying staff recommendation.
2. The proposed authorization remains consistent with the Project Selection Criteria and Guidelines last updated by the Conservancy on September 20, 2007.

3. The California Wildlife Foundation and Friends of Corte Madera Creek Watershed are nonprofit organizations existing under Section 501(c)(3) of the United States Internal Revenue Code, whose purposes are consistent with Division 21 of the California Public Resources Code.”
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## **PROJECT SUMMARY:**

The Invasive *Spartina* Project (ISP) Control Program, which will allow for the removal of invasive *Spartina* to restore the affected wetlands and streams of the San Francisco estuary, comprise of 1) consulting services for planning and management needed to plan, coordinate and obtain environmental permits and approvals for its implementation, and 2) grants to existing grantees to carry out treatment activities. This authorization would enable the Conservancy to accept federal grant funds from the National Oceanic and Atmospheric Administration (NOAA) under the American Recovery and Reinvestment Act of 2009 (ARRA), if awarded, in order to implement ongoing planning and management activities until through 2009 and treatment and eradication of invasive *Spartina* through the 2010 treatment season, as follows:

### **1. Planning and Management Consulting Services:**

On April 24, 2008, the Conservancy authorized ongoing planning and management through May 31, 2010. The April 24, 2008 staff recommendation, attached as Exhibit 3, describes the broad range of management, planning and monitoring efforts to be carried out over this time period. The April 24, 2008 authorization anticipated that bond funds appropriated to the Conservancy would be used to undertake the proposed management, planning and monitoring efforts. At the time the application to NOAA was submitted to fund these previously authorized activities, it was not clear if bond funding for the Conservancy would restart in time for planning and coordinating implementation of the 2009 treatment. Since the freeze on bond funding threatened to stall this high priority project, Conservancy staff applied for the federal NOAA ARRA grant for this purpose. This authorization will enable substitution of the federal NOAA ARRA funds, if awarded, for bond funds authorized by the April 24, 2008 Staff Recommendation. Specifically, the NOAA grant would fund consultant services for the 2009 treatment season through December 31, 2009. These services will include: environmental documentation, inventory and efficacy monitoring, water quality collection and sampling, California clapper rail monitoring, refinement of lab analyses of *Spartina* samples, management of an enormous amount of monitoring data, scheduling and coordinating treatment among grantees, and numerous site visits to conduct the three types of monitoring and to oversee treatment and mitigation activities. Total proposed funding for these activities is \$1,033,197.

In addition to the management, planning and monitoring activities, the NOAA ARRA grant, if awarded, may provide an additional \$60,000 to undertake a stakeholder workshop, which is a new, not previously funded activity. The purpose of the workshop is to develop a rapid response plan to detect and respond to new invasive *Spartina* growth following the conclusion of the treatment and eradication of known invasive *Spartina*. The workshop funding will include costs for the venue, planning, tours and for sessions designed to identify issues and solutions for a rapid response plan.

Finally, the NOAA ARRA grant would also provide \$141,325, which the Conservancy may use to reimburse Conservancy staff costs in administering the ISP Control Program and the

management, planning and monitoring activities.

**2) Treatment and Eradication:**

On April 2, 2009, the Conservancy authorized funding for treatment and eradication activities for 2009 (In 2008, the Conservancy had previously approved site-specific plans for the 2008 through the 2010 treatment seasons). The funding which was authorized for the 2009 treatment season is expected to come from one other federal grant (US EPA). The April 2, 2009 staff recommendation, which provides detail on the nature of and funding for the 2009 treatment season and on the site-specific plans for 2009 and 2010, is attached as Exhibit 4.

The current, proposed authorization would enable the acceptance and disbursement of the NOAA ARRA grant funds under NOAA’s Coastal and Marine Restoration Grants Program, to complete treatment in 2009 and undertake an additional year of treatment and eradication, extending the available funding for treatment to cover the 2010 treatment activities. Disbursement of federal NOAA funds through amendment of existing grants for ongoing treatment through 2010 will implement the updated site specific plans approved by the Conservancy at its meeting of April 24, 2008, which describe the strategy and methods proposed for treatment through 2010. (See Exhibit 3, April 24, staff recommendation).

**PROJECT FINANCING**

NOAA grant to the Coastal Conservancy	\$1,734,522
Matching funds for treatment	\$100,000
<b>Total Project Costs</b>	<b>\$1,834,522</b>

Funding for the proposed disbursement of a total of \$1,593,197 for invasive *Spartina*, treatment and eradication projects, planning for their implementation, and holding a stakeholder workshop is expected to be provided under a grant from NOAA under its Coastal and Marine Restoration Grant Program (CMRGP) using federal ARRA funds. An additional \$141,325 for Conservancy staff support for planning, management and monitoring is also being provided from the same source for a total NOAA CMRGP grant of \$1,734,522.

Under the CMRGP, NOAA may provide funds for projects to restore coastal and bay habitats that have strong on-the-ground habitat restoration components with long-term ecological habitat improvements, and that provide social and economic benefits for people and their communities. The NOAA funds for treatment activities, planning, and management under the *Spartina* Control Program will accomplish these purposes. In addition, the funds will be used for a stakeholder workshop designed to promote the long-term stewardship to keep new infestations from taking hold once ISP no longer exists, thus providing benefits for communities surrounding the Estuary. This funding will also provide economic benefits by maintaining and/or creating approximately 80 jobs annually.

The breakdown of costs for planning, management and monitoring and for treatment and eradication projects is as follows:

**A. Planning, Management and Monitoring through May 2010**

Substitution for Conservancy Funds

NOAA ARRA Grant	\$1,033,197
Stakeholder Workshop	
NOAA ARRA Grant	\$60,000
<b>Subtotal</b>	<b>\$1,093,197</b>
Conservancy Staff Costs	
NOAA ARRA Grant	\$141,325
<b><u>TOTAL</u></b>	<b><u>\$1,234,522</u></b>

**B. Breakdown by Grantee of Expected Financing for Ongoing Treatment Projects through 2010:**

Depending on the respective efficacy of the 2008 and 2009 treatment found at the various project sites, the funding each grantee will receive may be adjusted among grantees, but with no increase to the total amount authorized. Each grantee will contribute matching funds and in-kind services as follows:

<u>Grantee</u>	<u>NOAA ARRA Grant</u>	<u>New Grantee Match</u>
San Mateo Co. Mosquito Abatement District	\$75,000	\$30,000
California Wildlife Foundation	\$135,000	\$0
East Bay Regional Park District	\$75,000	\$30,000
Alameda County Flood Control & Water Conservation District	\$40,000	\$6,000
City of Alameda	\$50,000	\$5,000
City of San Leandro	\$30,000	\$5,000
City of Palo Alto	\$10,000	\$1,000
Friends of Corte Madera Creek Watershed	\$75,000	\$21,000
California Department of Parks and Recreation	\$10,000	\$2,000

**TOTAL**

**\$500,000**

**\$100,000**

**CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:**

As described in previous staff recommendations (Exhibits 1 through 4) and associated Conservancy resolutions, the ISP and implementation of the Control Program serve to carry out the objectives for the San Francisco Bay Area Conservancy Program mandated by Chapter 4.5 of Division 21 of the Public Resources Code, Sections 31160-31165. The ISP and its Control Program continue to protect and restore tidal marshes, which are natural habitats of regional importance.

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

The ISP and implementation of the Control Program continue to carry out the goals and objective of the 2007 Strategic Plan, as specified in the staff recommendation of April 24, 2008 (Exhibit 3).

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

The proposed authorization, which provides additional funding for the ISP Control Program is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated September 20, 2007, for the same reasons as detailed in the staff recommendation of April 24, 2008 (Exhibit 3).

**CONSISTENCY WITH SAN FRANCISCO BAY PLAN:**

The ISP Control Program is consistent with the San Francisco Bay Plan adopted by the San Francisco Bay Conservation and Development Commission. Policy 3(c), found in the section entitled "Marshes and Mudflats" (page 9), states: "the quality of existing marshes should be improved by appropriate measures whenever possible." The main purpose of this project is to remove invasive *Spartina* to improve the long-term quality of existing marsh habitat in the baylands of the San Francisco Estuary.

**COMPLIANCE WITH CEQA:**

The three-year updated site-specific plans and mitigation matrices for activities through 2010 for 24 sites were reviewed by the Conservancy in connection with its April 24, 2008 authorization. (See Exhibit 3). In connection with that review, the Conservancy determined that the environmental effects associated with each of the proposed treatment projects and the required mitigation to reduce those effect to less than significant level had been fully considered under the Conservancy-certified programmatic "Final Programmatic Environmental Impact Statement/Environmental Impact Report, San Francisco Estuary Invasive *Spartina* Project: *Spartina* Control Program" (FEIS/R) prepared for the ISP Control Program pursuant to the California Environmental Quality Act (CEQA) and that no new mitigation measures were

required. Accordingly, the Conservancy also determined that no further environmental documentation was needed under CEQA Guidelines, Section 151168 (c).

Since the treatment projects, including potential environmental effects and mitigation measures, remain materially unchanged, the proposed authorization remains consistent with the CEQA findings adopted by the Conservancy in connection with its prior authorizations.

Over the past year, through legislation, Attorney General's opinion, litigation and interim guidance and proposed revised CEQA guidelines, it has become increasingly clear that CEQA analysis must consider or analyze the climate change-related impacts of a project. The FEIS/R did not consider or analyze the climate change impacts of the project, including greenhouse gas emissions generated by vehicle, boat and helicopter trips, and potential loss of carbon sequestration by the removal of invasive *Spartina*. The following provides this analysis and conclusions:

**Carbon Sequestration:**

The remaining invasive *Spartina* in the San Francisco Estuary consists of approximately 150 net acres of plants scattered throughout the Bay's edges and streams draining into the Bay. There will be a loss of carbon sequestration greater than that generated by the return of native vegetation, including eventually the return of native *Spartina foliosa*. However, the difference will be negligible, since the removal of invasive *Spartina* from the marsh areas will enable the re-establishment of the native cordgrass. Further, as has been observed in many areas where invasive *Spartina* has been eradicated, other native plants which have been displaced by the non-native *Spartina*, including pickleweed species, grindelia, frankenia, jaumea, and saltgrass , , re-inhabit that area and flourish.

To the extent that re-vegetation does not completely replace the invasive *Spartina* that has been removed, the FEIS/R already provides for required project mitigation that will further offset this impact. The FEIS/R requires the replanting of various sites with native vegetation, as part of the project. For example, ISP continues to restore the treated tidal marsh at the Elsie Roemer Bird Sanctuary in Alameda by planting native marsh vegetation. ISP is also growing native marsh plants offsite to ensure an adequate supply of appropriate native vegetation for Elsie Roemer and other potential restoration sites that have been cleared of invasive *Spartina*. In light of these forms of re-vegetation, the loss of carbon sequestration is considered not a significant impact.

**Carbon Dioxide Caused by Vehicle Miles Traveled:**

Green house gas emissions will result from vehicle usage during treatment and monitoring activities. During treatment boats and helicopters will be utilized for the application of herbicide to remove invasive *Spartina*. For monitoring activities small cars will be used by field biologists to travel to all sites around the estuary, and an airplane will be used to take aerial photography. On an annual basis, 1,469 gallons of fuel will be used by helicopters (for travel of approximately 800 miles) and an airplane (for 160 miles), and 1,126 gallons of fuel for boats (800 miles) and small automobiles (20,000 miles). Based on fuel usage, the total emissions equal 24.50336 "carbon dioxide equivalent units" or the global warming equivalent of less than 25 metric tons of CO<sub>2</sub> per year. This was determined by applying the CARROT 3.1 general reporting protocol for greenhouse gas emissions (GHG's) provided by the Climate Registry for aviation fuel and motor fuel. This level of emissions will persist for only two more years under the proposed authorization and, in the following two years for the project as a whole, the annual total will

decrease substantially, as the remaining acreage of non-native *Spartina* shrinks, until full eradication, expected in 2012.

To establish context in which to consider the order of magnitude of these project-generated GHG's, it may be noted that the California Air Resources Board has proposed a threshold of 7,000 metric tons of CO<sub>2</sub>/year, below which the effects of a project would be deemed "not significant", for industrial projects that result in stationary, continuous sources of GHG emissions. Likewise, the South Coast Air Quality Management District has adopted a threshold of 10,000 tons of CO<sub>2</sub> per year for similar industrial projects. Further, the South Coast Air Quality Management District has proposed for consideration, but not adopted, a threshold of 3,000 metric tons per year for residential and commercial projects. It should be noted that each of these thresholds are based on the annual emission each year throughout the project's useful life.

By contrast the GHG's anticipated under this authorization are less than 25 tons per year and will persist for only two years, with future ISP Control Program GHG's to dwindle each year to near zero in 2012, when it is anticipated that invasive *Spartina* will be predominantly eradicated. In order to further reduce the comparatively minor GHG impact of the proposed actions, the Conservancy ISP contractors have agreed to require that field biologists engaging in monitoring activities carpool to the extent possible. The Conservancy will also negotiate with its ISP contractors to allow for a monetary incentive for any project travel by contractors or their subcontractors if travel is done by public transportation or bicycle.

In light of the low carbon dioxide equivalent generated by the project and the proposed further reduction of automobile miles traveled, this is also considered not a significant impact.