

COASTAL CONSERVANCY

Staff Recommendation
March 10, 2005

**INVASIVE *SPARTINA* PROJECT (ISP)
PHASE II-CONTROL PROGRAM
2005-2006 TREATMENT**

File No. 99-054
Project Manager: Maxene Spellman

RECOMMENDED ACTION: Authorization 1) to accept \$3,000,000 as a grant from the Wildlife Conservation Board (WCB) to implement the Invasive *Spartina* Control Program for 2005 and 2006; and 2) to disburse up to \$1,672,550 of the WCB grant funds for ongoing and expanded environmental consulting services and signage program needed to operate and manage the *Spartina* Control Program on an accelerated schedule through 2006.

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

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

Exhibit 1: September 25, 2003 Staff Recommendation

Exhibit 2: June 30, 2004 Staff Recommendation

Exhibit 3: Map of 2005 Treatment Sites

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:

“The State Coastal Conservancy hereby authorizes the following:

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1. Acceptance of three million dollars (\$3,000,000) as a grant from the Wildlife Conservation Board (WCB).
2. Disbursement of up to one million six hundred seventy-two thousand five hundred fifty dollars (\$1,672,550) of the WCB Funds for the following:
 - a. Ongoing environmental consulting services including the addition of a field operations assistant needed to plan, prepare for and comply with all regulatory requirements in connection with the *Spartina* Control Program (up to \$1,564,560).
 - b. One or more grants to a nonprofit organization to undertake preliminary tasks, including public outreach and education, necessary for 2005 and 2006 *Spartina* treatment and control work on private property (up to \$67,990).
 - c. To supplement an existing grant to the Bay Area Association of Governments (ABAG) to allow for an expanded *Spartina* Control Program signage program (up to an additional \$40,000).

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 to continue and expand *Spartina* Control Program’s environmental consultant services and disbursement of funds as a grant to a nonprofit organization for public outreach and pre-treatment purposes, is consistent with the Conservancy authorization and findings adopted September 25, 2003, as shown in the staff recommendation attached as Exhibit 2 to this staff recommendation.
2. The proposed authorization is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 24, 2001.
3. Prior to disbursement of funds, there shall be in place a fully executed Memorandum of Understanding between the Conservancy and WCB authorizing the 2005/2006 ISP Control Program activities as an approved project under WCB Agreement Number WC-3032BT.
4. The Friends of Corte Madera Creek Watershed and the Coastal Conservancy Association are private 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. Any other nonprofit grantee to which funds will be awarded under this authorization shall meet the same requirement.

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PROJECT DESCRIPTION:

Introduction

As explained in detail in the September 25, 2003 staff recommendation (Exhibit 1), treatment and control of invasive *Spartina* and its hybrids within the San Francisco Bay Estuary is critical to the long-term health of the Estuary and to the species which inhabit and rely upon the salt marshes and tidal flats along its perimeter. In addition, the spread of non-native *Spartina* threatens restoration efforts within the Estuary. Invasive *Spartina* spreads at a greater than exponential rate, and every marsh restoration project implemented within the south and central San Francisco Bay Estuary in the past 15 years has been invaded by non-native invasive *Spartina*.

Since 2000, the Conservancy has managed the regionally coordinated effort to address the problem, through the Conservancy's Invasive *Spartina* Project (ISP). In September 2003, the Conservancy approved the Programmatic Environmental Impact Statement/Environmental Impact Report (PEIS/R) for the ISP Control Program. At that meeting the Conservancy also authorized disbursement of existing CALFED funds as grants to nine management and land owning entities for demonstration projects to treat and control invasive *Spartina* throughout the San Francisco Bay Estuary. The Conservancy also authorized disbursement of funds for environmental consultant services to continue the environmental documentation and coordination of Estuary-wide treatment for the Implementation Phase II of ISP Control Program. On June 30, 2004 the Conservancy authorized additional treatment grants and a grant to ABAG to implement a signage program (Exhibit 2, June 30, 2004 Staff Recommendation).

If approved, the authorization proposed by this staff recommendation would allow the expenditure of \$1,672,550 for site-specific coordination, environmental documentation and signage for all known infested sites over the next two years. The authorization is to be funded through a WCB grant to the Conservancy for the San Francisco Bay (a portion of a \$40 million grant approved in November 2004) Treatment efforts during the next two years are critical to the success of the Program and require a tremendous amount of ongoing environmental documentation as described below.

It is expected that the remaining balance of the WCB grant funding will be needed and used as grants for treatment at new sites, and to supplement existing grants to extend and add to the sites treated in 2004. The sites and numbers of acres for 2005 treatment have been identified (a total of 1,100 acres are targeted). However, Site-Specific Plans with checklists verifying consistency with the certified PEIS/R have not yet been completed.

Once plans and environmental documentation are completed and any additional grantees have been identified, staff will return to the Conservancy Board for approval of site-specific environmental documentation and disbursement of funds to grantees for the 2005 treatment projects. Staff will again return to the Board in 2006 for authorization to disburse the final balance of the WCB funds for the 2006 treatment projects and for approval of the related site-specific environmental documentation.

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2004 Project Accomplishments:

1. Completion of First Full-Scale Treatment Season

In 2004, the Conservancy's ISP worked with regulatory agencies and assisted grantees to obtain all necessary approvals and permits to begin treatment for the first full-scale treatment season in early September 2004. Grantees successfully treated a total of 435 acres of the approximately 1,600 acres of invasive *Spartina* and hybrids found in the Estuary during the fall of 2004 (treatment season was restricted to September and October to protect breeding California clapper rail). A variety of methods were used including mowing, covering, digging and treatment with aquatic herbicide. Grantees complied with all the mitigation measures identified in the PEIS/R and conducted treatment activities consistent with the Site-Specific Plans for each site. A few areas that were slated for treatment remained untreated due to heavy rains in mid-October that precluded vehicle travel on levees constructed of bay mud.

2. Third International Invasive *Spartina* Conference

In November of 2004 the ISP sponsored the Third International Invasive *Spartina* Conference. Renowned scientists from the San Francisco Bay Area, other coastal states, and around the world discussed issues associated with the spread of invasive *Spartina*, research results, control efforts, and plans for eradication of *Spartina* from the San Francisco Bay Estuary. Towards the conclusion of the conference an expert panel agreed unequivocally that the Conservancy's ISP should continue with an aggressive strategy to eradicate invasive *Spartina* from the Estuary, and expressed confidence in ISP's ability to do so.

3. Monitoring Report and Conclusions

The ISP produced a Monitoring Report in 2004 that found that the non-native *Spartina*'s average rate of increase in area covered by all of the non-native *Spartina* species was 244% with hybrids spreading at 317%. Based on this rate of increase, by the 2005 treatment season, there could be as much as 3,200 acres of non-native *Spartina* requiring treatment. Only an aggressive, comprehensive strategy aimed at treating all of the *Spartina* in the Estuary during 2005 and 2006 has a realistic chance of eradicating invasive *Spartina*. Thus, work in 2005 will continue, and expand where appropriate, on the sites treated in 2004, and will add sites including locations where outliers are found in Marin County, and untreated sites along the San Pablo and San Leandro/Hayward shorelines (See Exhibit 3, Map of 2005 Treatment Sites).

Project Description for Requested Authorization

This authorization is for ongoing operations and management of the ISP that relate to activities for CEQA/NEPA compliance and for permitting and approvals under a host of federal and state environmental laws that are required for implementation of the Control Program. Ongoing environmental consultant services include the Project Director, the Field Operations Manager (FOM), and the Field Biologist. The proposed additional environmental service consultant is an Assistant Field Operations Manager to assist the FOM in preparing plans and approving compliance with environmental mitigation checklists as described below. The proposed grant of funds to one or more non-profit

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organizations, which may also eventually conduct treatment, is needed to coordinate with and obtain permission from private property owners on whose property *Spartina* infestations are found.

A supplement to the existing ABAG grant is needed to produce and install signage on new treatment sites, as required by the PEIS/R. ABAG will also complete signage on sites treated in 2004. Substantial funding for ISP's existing environmental service consultants and the proposed additional consultants and grantee(s) are needed because of the aggressive eradication strategy planned for 2005/2006 which will require a massive amount of yearly environmental documentation including but not limited to the following:

- The Field Operations Manager working with the landowning and land management entities produces a Site-Specific Plan for each treatment site. The Site-Specific Plan includes a description of where and how treatment will be carried out, and identification of potential impacts and mitigation measures identified in the PEIS/R. A mitigation checklist is also included for verification of its implementation before, during, and after treatment activities. The FOM, using the checklist, must also be present during treatment to verify that all mitigation is carried out by the grantee. For 2005, the FOM will need assistance to coordinate with partners to prepare and sign off on, associated checklists for at least 23 Site-Specific Plans covering 129 sub-sites.
- The United States Fish and Wildlife Service (FWS) uses these plans as a basis for Section 7 Consultations and Biological Opinions under the Endangered Species Act, for Section 106 compliance under the National Historic Preservation Act, and as Environmental Assessments under NEPA for each site slated for treatment. Since the regulatory arm of FWS lacks sufficient staff for accomplishing the required documentation, ISP's environmental consultants provide much of the groundwork to enable FWS to produce final documentation in a timely manner.
- The State Department of Fish and Game (DFG) requires compliance with the state Fully Protected Species Act (FPSA). Conservancy staff and ISP's environmental consultants must coordinate with DFG to provide documentation adequate for compliance.
- On the regional level, the ISP Project Director applies for coverage under the Statewide General National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board prior to each year's treatment work.
- Monitoring and mapping of treated and untreated sites and monitoring of water quality for the NPDES permit compliance are also needed. The ISP Field Biologist coordinates and oversees required monitoring reports and activities.
- Surveying of California clapper rail, and preparation of an analysis of a new herbicide will be needed as explained below.
- Obtaining the necessary landowner permission for treatment activities at several small privately owned properties could be accomplished by outreach of local non-

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profit organizations experienced in involving private landowners to achieve the goals of ISP's Control Program.

Strategy for Achieving Eradication

Building upon the partnerships and experience developed during the 2004 treatment, the Conservancy and its environmental consultants will implement a 5-pronged strategy to eradicate invasive *Spartina* as follows:

1. Continue close coordination with landowner and land management entities for the estimated 129 sub-sites infested with invasive *Spartina*, and with regulatory agencies and FWS to ensure site-specific plans are in place, and all necessary permits and approvals are obtained by late summer 2005 to coincide with the commencement of the Treatment Season.
2. Apply an improved aquatic herbicide called Imazapyr. Imazapyr is well suited to the challenges of *Spartina* control in an estuarine environment. Less chemical in the chemical-to-water mixture is required than is currently needed using glyphosate, and higher efficacy is expected. In the State of Washington Imazapyr is currently used with no significant impacts to the environment and with increased effectiveness in *Spartina* eradication. An analysis of Imazapyr with regard to its impacts to the environment will be conducted, the results of which will be the basis for creating the environmental documentation that is required to approve the use of Imazapyr under the ISP Control Program. . Once this analysis is completed, staff will bring the environmental documentation to the Conservancy Board for approval in within the next 5 months. Also, the State Department of Pesticide Regulation (DPR) is expected to approve Imazapyr for aquatic environments prior to the 2005 Treatment Season.
3. Apply greater use of aerial treatment where suitable. Using aerial applications of Imazapyr will more effectively remove *Spartina* from some of the more-difficult-to-access sites from ground-based operations. This will save time and money, and enable ISP and grantees to target greater acreage for treatment.
4. Contact the large number of individual private property owners whose properties are infested with non-native *Spartina* to obtain permission for removal. To make contact as well as conduct removal at the several small sites, it may be preferable to award a grant(s) to one or more non-profit organizations such as the Friends of Corte Madera Creek Watershed, experienced in both public outreach and treatment of invasive *Spartina*. Necessary public outreach will also be accomplished by informational signage at all treatment sites.
5. Conduct California clapper rail surveys. Of particular concern in targeting all the invasive *Spartina* for treatment over the next two years is to minimize potential adverse effects on the endangered California clapper rail. The surveys will guide

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the site-specific planning for treatment and subsequent site-specific environmental documentation to address this issue.

PROJECT FINANCING:

WCB grant to the Coastal Conservancy	\$1,672,550*
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*Total grant from WCB for the ISP is \$3,000,000; staff will return to the Board for subsequent authorization to disburse remaining funds.

Conservancy funding for the proposed disbursement is expected to be provided under an existing agreement by which WCB may provide funds to the Conservancy for San Francisco Bay projects. Under the grant agreement with WCB, the Conservancy may use these funds for wetland habitat restoration projects within the nine-county San Francisco Bay Area that implement the restoration goals of the San Francisco Bay Joint Venture (“SFBJV”) and the *San Francisco Baylands Ecosystem Habitat Goals Report* (“Goals Report”) and that meet the priorities of the Conservancy as described in Section 31162 of the Public Resources Code. In addition, any proposed project must, under the WCB grant agreement, be a “high priority” project as identified in the grant agreement or otherwise authorized as a priority project by WCB in the “Memorandum of Understanding” between WCB and the Conservancy that is required before any project may move forward.

The WCB grant funding, in turn, is derived from an appropriation from the Water Security, Clean Drinking Water, Coastal Beach Protection Fund of 2002 (Proposition 50). The Proposition 50 funds were appropriated under the specific authorization found in Section 79572(c) of the Water Code and may be used for the general purpose of acquisition, protection and restoration of coastal wetlands.

The project meets the criteria of the WCB grant agreement and the related requirements of Proposition 50 in all respects. As required by the WCB grant agreement and Proposition 50, the proposed project serves to protect and preserve fish and wildlife habitat of the San Francisco Bay through restoration of wetlands, and is specifically identified in the WCB grant agreement as a high priority project that specifically benefits the San Francisco Estuary. Further, the project is one that implements the goals of the SFBJV and Goals Report and squarely meets the priorities and objectives of the Conservancy found in Section 31162 of the Public Resources Code, since it carries out the San Francisco Bay Area Conservancy Program’s goal to protect, restore, and enhance natural habitats as detailed under the heading “Consistency with Conservancy’s Enabling Legislation”, below.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

As described in previous staff recommendations (Exhibits 1 and 2) and associated Conservancy resolutions, the ISP and implementation of the Control Program serve to carry out the objectives for the San Francisco Bay Conservancy Program mandated by

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Chapter 4.5 of the Conservancy's enabling legislation (Public Resources Code Section 31162(a)), since both the ISP and its Control Program will serve to protect and restore tidal marshes, which are natural habitats of regional importance. Operation and management activities for the ISP engage CEQA/NEPA compliance and permitting required for implementation of the Control Program.

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

San Francisco Bay Program Goal Matrix under Regional Projects identifies the *Spartina* Control project as a program of regional significance under the Strategic Plan.

Consistent with **Goal 5, Objective C** of the Conservancy's Strategic Plan, the proposed project will serve to implement approximately 13 projects to eradicate non-native invasive species that threaten native coastal habitats. If left uncontrolled non-native invasive *Spartina* will potentially spread up and down the coast to other California estuaries.

Consistent with **Goal 10, Objective A**, the proposed project will initiate implementation of the Invasive *Spartina* Project: *Spartina* Control Program to prevent up to 30,000 acres of marsh and mudflats from being invaded and potentially covered by invasive *Spartina* and hybrids and to preserve and restore natural habitats in the San Francisco baylands.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, 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 Implementation Phase II of the ISP Control Program is strongly supported by findings of the Third International Invasive *Spartina* Conference (November, 2004). Renowned scientists from the San Francisco Bay Area, other coastal states, and around the world agree that the Conservancy should continue its aggressive actions to eradicate invasive *Spartina* from the Estuary. The objective of eradication of invasive *Spartina* is also specifically supported in the Goals Report and by the SFBJV. Furthermore, in the published Comprehensive Conservation Management Plan for the San Francisco Estuary, San Francisco Estuary

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Project stakeholders have identified control of invasive species as the top priority for the restoration and protection of the Estuary.

4. **Location** This project is located in the nine San Francisco Bay Area Counties to benefit the restoration of the San Francisco baylands.
5. **Need:** Funding for ISP's existing environmental service consultants and the proposed addition of one consultant, one or more grants to nonprofit organizations, and supplemental funding for signage, are needed because the aggressive eradication strategy planned for 2005/2006 requires a massive amount of work to comply with CEQA, NEPA, the endangered species laws and a host of other state and federal environmental laws and regulations..
6. **Greater-than-local interest:** Introduced *Spartina* threatens to move up the delta, and down the coast to southern California. In the San Francisco Bay, introduced *Spartina* threatens to displace listed state and federal special status species, such as the endangered California clapper rail, California black rail, and the salt marsh harvest mouse.

Additional Criteria

7. **Urgency:** As confirmed at the Third International Invasive *Spartina* Conference, experts from the region and around the world believe that if the spread of introduced *Spartina* is not controlled within the next few years, the greater than exponential spread of the plants and extensive hybridization with the native *Spartina foliosa* will preclude any chance for successful control in the future. Funding for ongoing operation and management has run out. More is needed to continue compliance with CEQA/NEPA requirements for Implementation Phase II of the Control Program. If the Conservancy and its partners can address the problem appropriately in the short-term, long-term maintenance expenses can be avoided.
8. **Readiness:** CEQA/NEPA compliance activities for 2005 have begun and the 1,015 acres targeted for 2005 treatment have been identified. Environmental service consultants are already fully engaged and ready to build on the experience gained in the success of the 2004 Treatment Season.
9. **Cooperation:** Existing grantees (landowners and land managers) are on board for cooperating in the preparation of the Site-Specific Plans and permitting coordinated by the operation and management of the ISP Control Program. In addition, coordination with the regulatory agencies is ongoing.

CONSISTENCY WITH SAN FRANCISCO BAY PLAN:

The Invasive *Spartina* Project: *Spartina* Control Program is consistent with the San Francisco Bay Plan, Section entitled "Marshes and Mudflats", Policy 3 (c) (page 9) that 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.

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COMPLIANCE WITH CEQA:

Activities associated with operation and management of the Invasive *Spartina* Control Program are designed to produce environmental documentation for implementation of the Invasive *Spartina* treatment activities. Therefore, there are no environmental effects for operation and management activities. Staff will return for Conservancy Board approval for CEQA compliance for new and expanded individual treatment projects, and, as necessary for approval of environmental documentation needed in relation to the use of the chemical Imazapyr.