COASTAL CONSERVANCY

Staff Recommendation
June 16, 2005

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

File No. 99-054
Project Manager: Maxene Spellman

RECOMMENDED ACTION: Conservancy: 1) authorization to disburse up to $814,725 for treatment and removal projects under the Invasive *Spartina* Project (ISP) Control Program; 2) adoption of findings regarding the proposed Addendum to the "Final Programmatic Environmental Impact Statement/Environmental Impact Report, San Francisco Estuary Invasive *Spartina* Project, *Spartina* Control Program", incorporating the use of the herbicide imazapyr into the ISP Control Program; and 3) adoption of findings regarding environmental documentation for 22 site-specific *Spartina* treatment and eradication projects.

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: March 10, 2005 Staff Recommendation

Exhibit 3: Map of 2005 Treatment Sites

Exhibit 4: Site-Specific Checklists

Exhibit 5: Addendum to the ISP FEIS/R

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160 through 31164 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed eight hundred fourteen thousand seven hundred twenty-five dollars ($814,725) for implementation of invasive *Spartina* treatment and eradication projects under the Invasive

Spartina Project (ISP) *Spartina* Control Program. The authorized funds may be used to supplement existing treatment and eradication grants to the Alameda County Flood Control District, California Department of Parks and Recreation, the California Wildlife Foundation, the City of Palo Alto, the East Bay Regional Park District, Friends of Corte Madera Creek Watershed, and USFWS Don Edwards San Francisco Bay National Wildlife Refuge. The funds may also be used for grants to the City of Alameda, the City of San Leandro, and the San Mateo County Mosquito Abatement District for new invasive *Spartina* treatment and eradication projects. Each grant of funds shall be subject to the following conditions:

1. Prior to implementing any control and treatment project and prior to disbursement of any funds to the grantee, the grantee shall submit for review and approval of the Executive Officer a site-specific plan, including mitigation measures, and a work program, including a schedule and budget, and shall provide evidence that the grantee has obtained all necessary permits and approvals for the project.
2. In carrying out any control and treatment 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 or approval for the project, or 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."

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 expansion or extension of existing *Spartina* control and treatment projects and for new *Spartina* control and treatment projects is consistent with Public Resources Code Sections 31160-31164 and with the resolutions, findings and discussion accompanying the Conservancy authorization of 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. The Conservancy has independently reviewed and considered the "Addendum to 2003 Invasive *Spartina* Project Control Program Final Programmatic Environmental Impact Report" dated May 2005, attached to the accompanying staff recommendation as Exhibit 5, and finds that the change proposed in the ISP Control Program, incorporating of the use of the herbicide imazapyr and associated surfactants and colorants for invasive *Spartina* treatment, may be appropriately addressed in an addendum under the California Environmental Quality Act (CEQA), because there is no substantial evidence that the proposed change to the Control Program will give rise to: new significant environmental effects not considered 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; or a substantial increase in the severity of the significant effects previously identified in the

FEIS/R. To the contrary, because of the lower toxicity of imazapyr and the surfactants to be used with imazapyr, the more rapid degradation of imazapyr, and the greater efficacy of imazapyr and the need for fewer applications over time, substantial evidence supports the conclusion that the use of imazapyr will reduce the effects of treatment of invasive *Spartina* in comparison to the effects considered under the FEIS/R with the use of the herbicide glyphosate and associated surfactants and colorants alone.

4. The environmental effects associated with the 22 treatment and eradication projects proposed for grant funding or coordination by the Conservancy under this authorization and the mitigation measures to reduce or avoid those effects were fully identified and considered in the FEIS/R adopted by the Conservancy September 25, 2003. (See Exhibit 1, September 25, 2003 Staff Recommendation.)"

PROJECT SUMMARY:

Since fall of 1999, the Conservancy has managed a regionally coordinated effort, the Invasive *Spartina* Project (ISP), to address the problem of the rapidly spreading invasive *Spartina* and its hybrids within the San Francisco Bay Estuary. In fall of 2004, eight partner grantees successfully treated a total of 435 acres of the approximately 1,500 acres of invasive *Spartina* and hybrids found in the Estuary. In November 2004, ISP sponsored the Third International Invasive *Spartina* Conference that focused on the San Francisco Estuary. At the conclusion of the Conference a panel of worldwide and local experts agreed that the Conservancy's ISP should continue with an aggressive strategy to eradicate invasive *Spartina* from the Estuary.

As explained in the March 10, 2005 staff recommendation (Exhibit 2), the Conservancy authorized disbursement of WCB grant funds for the Conservancy's ISP environmental consultants to implement an aggressive strategy to eradicate invasive *Spartina* over the next two years. The proposed strategy, which was explained in detail in the March 10, 2005 Staff Recommendation, builds upon partnerships and experience gained from the success of implementing the first regionally coordinated, full-scale 2004 treatment. It was also explained that once the Site-Specific Plans and environmental documentation for the next treatment seasons are available, staff would return for Board approval for disbursement of funds to grantees for the 2005/2006 treatment projects.

In collaboration with the Conservancy's partners, ISP contractors have completed twenty-two Site-Specific Plans covering 132 sub-sites over approximately 1,400 acres, for the 2005/2006 treatment seasons. (The Site-Specific Plans are available for review at the Conservancy's offices). The 1,400 acres of targeted invasive *Spartina* are located in approximately 12,000 acres of tidal marsh. Sixteen of these 22 control projects are proposed for Conservancy funding. The remaining six control projects are entirely funded by other sources, but are part of the regionally coordinated ISP Control Program

As also explained in the March 10, 2005 staff recommendation (Exhibit 2), the ISP Control Program methodology is expected to be modified by the addition of a new herbicide, imazapyr, for use in invasive *Spartina* treatment, as soon as that herbicide is approved by California regulatory agencies for use in an aquatic environment. Each of the site-specific projects proposed for funding may utilize this new methodology, if approved and if the Conservancy makes appropriate findings regarding this change in project. The "San Francisco Estuary

Invasive Spartina Project: Spartina Control Program Addendum" (Addendum), attached as Exhibit 5, describes the incorporation of imazapyr as a treatment tool and its anticipated impacts. The Addendum and the findings proposed for its approval under CEQA are also discussed in detail below, under the heading "Compliance with CEQA".

The strategy for eradication of invasive *Spartina* described in detail in the March 10, 2005 Staff Recommendation guides the Site-Specific Plans and is designed to achieve the following objectives for the 2005/2006 treatment projects: (1) follow up on control work that was previously completed; (2) treat the remaining infested sites in the Estuary; and (3) minimize potential adverse affects on the endangered California clapper rail and other listed species. Among the information about each site in the Site-Specific Plans are a description of the infestation, method for removal, an evaluation of impacts, and the mitigation measures the grantees are required to implement. Below is a brief summary of the sixteen projects proposed for Conservancy funding, followed by a summary of the six additional projects to be funded by other sources.

Grants for 2005/2006 Treatment Projects:

1. **Alameda Flood Control Channel, Alameda County** (Grantees: Alameda Flood Control District and the California Wildlife Foundation)

   The Alameda Flood Control Channel site includes the entire tidal reach of the Alameda Creek Flood Control Channel (a.k.a., "the Federal Project" or "Coyote Hills Slough"), as well as the Pond 3 restoration site (the initial introduction place for S. *alterniflora* in the Bay) and a strip of diked marsh to the north of the channel. The total site includes 471 acres of tidal marsh, with 149 acres of non-native *Spartina*, all of which will be treated during the 2005 and 2006 control seasons. Treatment methods at the site will include application of aquatic herbicide via spray truck, amphibious tracked vehicles, and helicopter. Potentially significant, unavoidable short-term impacts to visual resources and the endangered salt marsh harvest mouse were identified at some sub-sites.

2. **Alameda/San Leandro Bay Complex, Alameda County** (Grantees: East Bay Regional Parks District, City of Alameda, Alameda County Flood Control District, California Wildlife Foundation)

   The Alameda/San Leandro Bay Complex includes the entire shoreline of Alameda Island, and all of the marshes and tidal channels surrounding San Leandro Bay. The total site includes 314 acres of tidal marsh and channel, with 89 acres of non-native *Spartina*. To minimize impacts to highly sensitive California clapper rail habitat and to allow time for public education, control work in this complex will be phased over a number of years, with 37 acres slated for treatment in 2005 and up to 100 estimated acres in 2006. Treatment methods at the site will include application of aquatic herbicide via spray truck, backpack sprayer, amphibious tracked vehicles, boat, and helicopter. Potentially significant, unavoidable short-term impacts to the endangered California clapper rail were identified at some sub-sites.

3. **Bair and Greco Islands Complex, San Mateo County** (Grantee: USFWS Don Edwards National Wildlife Refuge)

   The Bair and Greco Islands Complex is comprised of 10 subsites that encompass the entirety of Bair and Greco island tidal marshes and the sloughs and creeks connecting and

adjacent to the islands. The total site includes 3,060 acres of tidal marsh, with 116 acres of non-native *Spartina*, all of which will be treated during the 2005 and 2006 control seasons. Treatment methods at the site will include application of aquatic herbicide via spray truck, backpack sprayer, amphibious tracked vehicles, boat, and helicopter. Potentially significant, unavoidable short-term impacts to the endangered salt marsh harvest mouse were identified at some sub-sites.

4. **Colma Creek/San Bruno Marsh Complex, San Mateo County** (Grantee: San Mateo County Mosquito Abatement District)

   The Colma Creek/San Bruno Marsh Complex includes all of the tidal marsh and channel in the vicinity of Colma Creek. The site includes 101 acres of tidal marsh and channel, with 56 acres of non-native *Spartina*. To minimize impacts to highly sensitive California clapper rail habitat and to allow time for public education, control work in this complex will be phased over a number of years, with 26 acres slated for treatment in 2005 and up to 68 estimated acres in 2006. Treatment methods at the site will include application of aquatic herbicide via spray truck, backpack sprayer, amphibious tracked vehicle, boat, and helicopter. Potentially significant, unavoidable short-term impacts to visual resources and the endangered California clapper rail were identified at some sub-sites.

5. **Corte Madera Creek Complex, Marin County** (Grantee: Friends of Corte Madera Creek Watershed)

   The Corte Madera Creek Complex includes 318 acres of tidal marshes and creek channel, with 12 acres of non-native *Spartina* (in this case, S. densiflora). A phased approach will be implemented at this location to allow adequate time for education and engagement of the community that lives on and near the Creek and marshes, but most of the area will be treated during the 2005 and 2006 control seasons. Treatment methods at the site will include application of aquatic herbicide via backpack sprayer, covering with geotextile fabric, and manual digging. Potentially significant, unavoidable short-term impacts to visual resources were identified at some sub-sites.

6. **Coyote Creek and Mowry Slough Complex, Santa Clara and Alameda Counties** (Grantee: USFWS Don Edwards National Wildlife Refuge)

   The Coyote Creek/Mowry Slough Complex includes all of the tidal marsh and channels between Coyote Creek and Dumbarton Bridge, including LaRiviere Marsh and Mayhew's Landing. The site includes 2,520 acres of tidal marsh and channel, with 14 acres of non-native *Spartina*, all of which will be treated during the 2005 and 2006 control seasons. Treatment methods at the site will include application of aquatic herbicide via spray truck, backpack sprayer, amphibious tracked vehicles, boat, and helicopter. Potentially significant, unavoidable short-term impacts to the endangered salt marsh harvest mouse were identified at some sub-sites.

7. **Emeryville Crescent, Alameda County** (Grantees: State Department of Parks and Recreation and East Bay Regional Parks District)

   The Emeryville Crescent includes the accreted marsh and mudflat on the northwest edge of the Bay Bridge, where it joins Interstate Highway 80. The site includes 104 acres of tidal marsh and mudflat, with 2-3 acres of non-native *Spartina*, all of which will be treated during the 2005 and 2006 control seasons. Treatment methods at the site will

include application of aquatic herbicide via spray truck, backpack sprayer, and amphibious tracked vehicles. Potentially significant, unavoidable short-term impacts to the endangered salt marsh harvest mouse were identified at some sub-sites.

8. **Ideal Marsh, Alameda County** (Grantee: U.S. Fish and Wildlife Service, Don Edwards National Wildlife Refuge)

   The Ideal Marsh is a 179-acre restored salt pond on the shore of the City of Fremont. The marsh has 65 acres of non-native *Spartina*, all of which will be treated during the 2005 and 2006 control seasons. Treatment methods at the site will include application of aquatic herbicide via spray truck, backpack sprayer, amphibious tracked vehicle, and helicopter. No potentially significant, unavoidable impacts were identified for this site.

9. **Oro Loma Marsh, Alameda County** (Grantee: East Bay Regional Park District)

   The Oro Loma Marsh is former salt pond that was restored to tidal marsh in recent years. Of the 324-acre marsh, approximately 100 acres is non-native *Spartina*, and all will be treated during the 2005 and 2006 control seasons. Treatment methods at the site will include application of aquatic herbicide via spray truck, amphibious tracked vehicles, and helicopter. Potentially significant, unavoidable short-term impacts to visual resources and the endangered salt marsh harvest mouse were identified at this site.

10. **Palo Alto Baylands, Santa Clara County** (Grantee: City of Palo Alto)

    The Palo Alto Baylands site includes 301 acres of tidal marsh, with less than one acre of non-native *Spartina*. Treatment methods at the site will include application of aquatic herbicide via spray truck, amphibious tracked vehicles, and helicopter. No potentially significant, unavoidable impacts were identified for this site.

11. **Point Pinole Marshes, Contra Costa County** (Grantee: East Bay Regional Park District)

    The Point Pinole Marshes site includes Whittel and Southern marshes. The site includes 36 acres of tidal marsh, with less than an acre of non-native *Spartina*. Treatment methods at the site will include application of aquatic herbicide via backpack sprayer. No potentially significant, unavoidable impacts are identified for the site.

12. **San Leandro/Hayward Shoreline Complex, Alameda County** (Grantees: Alameda County Flood Control District, California Wildlife Foundation, City of San Leandro, And East Bay Regional Parks District)

    The San Leandro/Hayward Shoreline Complex includes all tidal marsh, channels, mudflats, and restored salt ponds between Oakland Airport and Johnson's Landing. The complex includes 580 acres of tidal habitat, with 203 acres of non-native *Spartina*. To minimize impacts to highly sensitive California clapper rail habitat, control work in this complex will be phased over a number of years, with 145 acres slated for treatment in 2005 and up to 230 estimated acres in 2006. Treatment methods at the site will include application of aquatic herbicide via spray truck, backpack sprayer, amphibious tracked vehicle, boat, and helicopter. Potentially significant, unavoidable short-term impacts to visual resources and the endangered California clapper rail were identified at some sub-sites.

13. **Southampton Marsh, Contra Costa County** (Grantee: State Department of Parks and Recreation)

    The Southampton Marsh is a 184-acre marsh on the north shore of the Carquinez Strait, with less than an acre of non-native *Spartina*, which will be treated during the 2005 and 2006 control seasons. The treatment method employed at the site will be application of aquatic herbicide via backpack sprayer. No potentially significant, unavoidable impacts are identified for the site.

14. **Southeast San Francisco Complex, San Francisco County** (Grantee: California Wildlife Foundation)

    The Southeast San Francisco Complex includes six small marshes, along the San Francisco Shoreline. The sites total 77 acres of tidal marsh, with eight acres of non-native *Spartina*, all of which will be treated during the 2005 and 2006 control seasons. Treatment methods at the site will include application of aquatic herbicide via spray truck, and manual removal by digging and covering. No potentially significant, unavoidable impacts are identified for the site.

15. **West San Francisco Bay Complex, San Mateo County** (Grantee: San Mateo County Mosquito Abatement District)

    The West San Francisco Bay Complex is comprised of 18 relatively small marshes along the San Mateo shoreline between Brisbane and Foster City. The complex includes 360 acres of tidal marsh, channel, and lagoon, with 85 acres of non-native *Spartina*, all of which will be treated during the 2005 and 2006 control seasons. Treatment methods at the site will include application of aquatic herbicide via spray truck, backpack sprayer, amphibious tracked vehicle, boat, and helicopter. There are no potentially significant, unavoidable impacts identified for this site.

16. **Whale's Tail Complex, Alameda County** (Grantees: Alameda Flood Control District and the California Wildlife Foundation)

    The Whale's Tail Complex includes the entire tidal reach of Old Alameda Creek, the north and south "flukes" of Whale's Tail Marsh, and the Cargill Mitigation Marsh. The total site includes 563 acres of tidal marsh and channel, with 82 acres of non-native *Spartina*, all of which will be treated during the 2005 and 2006 control seasons. Treatment methods at the site will include application of aquatic herbicide via spray truck, backpack sprayer, amphibious tracked vehicles, and helicopter. Potentially significant, unavoidable short-term impacts to the endangered salt marsh harvest mouse were identified at some sub-sites.

2005/2006 Treatment Projects Coordinating With ISP But Not Funded by the Conservancy

17. **Blackie's Pasture, Marin County** The Blackie's Pasture site includes the tidal mouth and tidal reaches of Blackie's Creek. The total site includes 1.6 acres of tidal marsh, with 0.8 acres of non-native *Spartina*, all of which will be treated during the 2005 and 2006 control seasons. The treatment method employed at the site will be application of aquatic

herbicide via backpack sprayer. Potentially significant, unavoidable short-term impacts to visual resources are identified for this site. The Cherokee Simeon Venture I, LLC, will implement treatment and mitigation measures using its own funding.

18. **Cooley Landing Salt Pond Restoration, San Mateo County, San Mateo County** The Cooley Landing Salt Pond Restoration site includes 165 acres of restored tidal marsh, with 12 acres of non-native *Spartina*, all of which will be treated during the 2005 and 2006 control seasons. Treatment methods at the site will include application of aquatic herbicide via spray truck, backpack sprayer, amphibious tracked vehicles, and helicopter. No potentially significant, unavoidable impacts are identified for the site. Rhone Poulanc, Inc., will implement treatment and mitigation measures at this site using its own funding.

19. **Marin Outliers, Marin County** The Marin Outliers complex is comprised of 11 small tidal marsh sites, totaling 130 acres, each with a very small amount of non-native *Spartina*, totaling 2.5 acres in all. Treatment at these sites will be accomplished by application of herbicide via backpack sprayer, or by manual covering or digging. There are no potentially significant, unavoidable short-term impacts identified for this site. Cherokee Simeon Venture I, LLC, will implement treatment and mitigation measures using its own funding.

20. **Pickleweed Park, Marin County** The Pickleweed Park site includes 10 acres of tidal marsh, with an extremely small area (approximately 0.05 acre) of non-native *Spartina*. Treatment methods at the site will include application of aquatic herbicide via backpack sprayer and/or manual digging. No potentially significant, unavoidable impacts are identified for the site. Cherokee Simeon Venture I, LLC, will implement treatment and mitigation measures using its own funding.

21. **South Bay Marshes Complex, Santa Clara County** The South Bay Marshes Complex includes all of the tidal marsh on the shoreline of Santa Clara County. The site includes 2,000 acres of tidal marsh, with two acres of non-native *Spartina*. Treatment methods at the site will include application of aquatic herbicide via spray truck, backpack sprayer, amphibious tracked vehicles, and helicopter. No potentially significant, unavoidable impacts are identified for the site. The Santa Clara Valley Water District will implement treatment and mitigation measures at this site using its own funding.

22. **Two Points Complex, Contra Costa County** The Two Points Complex is comprised of a number of restored tidal marshes along the Richmond shoreline. The complex includes 598 acres of tidal marsh and channel, with only about 1 acre of non-native *Spartina*. The site will be treated by application of aquatic herbicide via backpack sprayer. There are no potentially significant, unavoidable short-term impacts identified for this site. Cherokee Simeon Venture I, LLC, will implement treatment and mitigation measures using its own funding.

PROJECT FINANCING:

A. Financing for this Authorization:

Coastal Conservancy	
CALFED grants	$327,500
WCB grant	487,225
Coastal Conservancy Sub-Total	**$814,725**
Grantees Matching (in-kind and financial)	$393,200
ISP Projects Entirely Funded by Others	$52,974
Total Cost of Projects	**$1,260,899**

Conservancy funding for the 16 *Spartina treatement and* control projects is expected to come from existing grants to the Conversancy from CALFED and from the Wildlife Conservation Board (WCB).

It is anticipated that $327,500 of the total amount of the Conservancy contribution will be derived from funds remaining under 1999 and 2001 CALFED grants to the Conservancy. Under the terms of these CALFED grants, the Conservancy may use the funds for *Spartina* treatment and control projects.

The remaining $487,225 of the Conservancy contribution for the treatment projects is expected to be provided under an existing grant 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.

B. Conservancy Funded Projects - Breakdown by Grantee of Financing for 2005/2006 Treatment Projects:

Grantee	Site(s)	SCC	Grantee Match
Alameda Flood Control District	Alameda Flood Control Channel	$62,246	$30,000
California Dept. Of Parks and Rec.	1.Emeryville Crescent 2. Southeast S. F. Shoreline 3. Southampton Marsh	$7,283	$1,300
California Wildlife Foundation	Alameda Flood Control Channel, Eden Landing	$51,907	$ 0.0
City of Alameda		$21,897	$10,000
City of Palo Alto	Palo Alto Baylands	$1,150	$500
City of San Leandro		$24,035	$3,000
East Bay Regional Park District	1.Emeryville Crescent 2. Oro Loma Marsh 3. Point Pinole Marshes	$227,951	$60,000
Friends of Corte Madera Creek Watershed	Corte Madera Ck. Complex	$111,517	$198,400
San Mateo County Mosquito Abatement District		$187,327	$30,000
USFWS Don Edwards San Francisco Bay Nat'l Wildlife Refuge	1. Bair & Greco Islands Complex 2. Coyote Ck. & Mowry Slough Complex	$119,412	$60,000

TOTAL	**$814,725**	**$393,200**

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

As described at length 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 Chapter 4.5 of the Conservancy's enabling legislation (Public Resources Code Sections 31160-31164), since both the ISP and its Control Program will serve to protect and restore tidal marshes, which are natural habitats of regional importance (Public Resources Code Section 31162(a)).

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 further a project designed 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 continue implementation of the ISP 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. This and the previous authorization for treatment projects will restore approximately 1,755 acres of marshes invaded by non-native invasive *Spartina* and hybrids.

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 of 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 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:** San Francisco Bay has lost up to 93 percent of its original tidal marsh habitat. Fifty-five percent of the threatened and endangered species of the Bay Area are found in the tidal marshes. Left uncontrolled, introduced *Spartina* threatens to convert a significant portion of the open mudflats and tidal marshes to a monoculture which will reduce habitat for the species endemic to the area. Without Conservancy funding, this threat would not be addressed.

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. 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 compliance and Site-Specific Plans for 2005/2006 are completed for the 1,755 acres targeted for control and eradication. It is anticipated that NEPA compliance and amended and new agreements with partners will be completed in time for the 2005 treatment season that begins in July 2005.

9. **Cooperation:** Existing grantees (landowners and land managers) are on board for cooperating to implement the Control Program Site-Specific Plans. In addition, ongoing coordination with the regulatory agencies is expected to result in compliance with permits and NEPA documentation required for the 2005/2006 Control Program.

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.

COMPLIANCE WITH CEQA:

Grant Funding or Coordination of 22 New or Expanded Site-Specific Treatment Projects

The proposed authorization involves Conservancy funding of 16 expanded or new site-specific invasive *Spartina* treatment and control projects. In addition, the Conservancy ISP will coordinate 6 new site-specific treatment and control projects. These 22 projects fall under the "Final Programmatic Environmental Impact Statement/Environmental Impact Report, San Francisco Estuary Invasive *Spartina* Project: *Spartina* Control Program" (FEIS/R) prepared for the ISP Control Project pursuant to the California Environmental Quality Act (CEQA). The FEIS/R was adopted by the Conservancy through its September 25, 2003 resolution certifying the EIR. The FEIS/R is maintained and available for review at the offices of the Conservancy.

The FEIS/R is a *programmatic* Environmental Impact Report (Section 15168 of the CEQA Guidelines, 14 Cal. Code of Regulations, Sections 15000 *et seq.*, hereafter "Guidelines") in that it analyzes the potential effects of implementing treatment methods for a regional program, rather than the impacts of a single individual project. This program-level EIS/R identifies mitigation measures that will be applied to reduce or eliminate impacts at treatment locations. The Conservancy may use the FEIS/R as a basis for "tiered" CEQA review and approval of individual treatment projects under the Control Program, including the new and expanded treatment proposed by this staff recommendation..

A subsequent activity that follows under a program EIR that has been assessed pursuant to CEQA must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared. If the agency proposing the later activity finds that its effects and required mitigation to reduce those effects were already identified and considered under the program EIR, the activity can be approved with no further environmental documentation (CEQA Guidelines, Section 15168(c)). The Guidelines suggest the use of a written checklist or similar device to document the evaluation of the activity to determine whether the environmental effects of the operation were covered in the program EIR.

Each of the 22 expanded or new site-specific projects proposed under this authorization has a prepared site-specific plan, describing the site and identifying the precise treatment activities proposed. Each of these plans has been assessed by use of a checklist to determine whether the effects of those activities and the mitigation required have been fully considered by the FEIS/R. This checklist documentation is attached as Exhibit 4. In each case, the conclusion is that the program FEIS/R did fully consider the effects associated with the site-specific project and that there are no new mitigation measures required. Conservancy staff recommends that the Conservancy adopt a finding to that effect. With such a finding, no further environmental documentation is required to satisfy the requirements of CEQA.

Change in ISP Control Program – Incorporation of Use of New Herbicide, Imazapyr

The Conservancy proposes to revise the ISP Control Program by adding a new aquatic herbicide, imazapyr, and associated surfactants and colorants, to the invasive *Spartina* control methods. At the time the FEIS/R was certified, the only herbicide registered by the California Environmental Protection Agency (CalEPA) for use in estuarine habitats was glyphosate. Imazapyr was unavailable as a treatment method because it had not yet been registered for aquatic use in California. However, imazapyr was recently submitted to

CalEPA's Department of Pesticide Regulation (DPR) for registration and is expected to be approved for estuarine use in early summer 2005. The ISP would like to include the use of imazapyr in the Control Program because under certain estuarine conditions it has several apparent benefits over the use of glyphosate (including increased efficacy and fewer limitations on timing of application). Additionally, because of the extremely rapid spread of invasive cordgrasses since the 2003 approval of the SCP, imazapyr may be used on a cumulatively larger area than that originally envisioned in the 2003 FPEIR.

Since the FEIS/R did not analyze the potential effects of using imazapyr and associated surfactants and colorants, and the extent of its use, these changes in the project and their potential environmental effects must be analyzed under CEQA. The CEQA Guidelines specify the process for doing so under Guidleines Sections 15164(a) and 15162. Section 15164(a) of the Guidelines specify that the an "addendum" to a previously certified EIR, without the need for further environmental review, if some changes or additions to a project are necessary, but none of the conditions described in Guidelines Section 15162 calling for preparation of a subsequent EIR have occurred. According to Section 15162, a subsequent EIR shall not be prepared for the revised project unless the Conservancy determines, based on substantial evidence in light of the whole record, that the change in the project will result in new significant effects not previously considered in the FEIS/R or will result in a substantial increase in the environmental effects previously considered.

In order to answer the question of whether the use of imazapyr and associated surfactants and colorants over an expanded treatment area would trigger new or increased environmental effects, the Conservancy commissioned a detailed evaluation of the use of this herbicide in the San Francisco Estuary by Leson & Associates in May 2005 (Appendix D to Exhibit 5 of this staff recommendation), including a review of existing ecological risk assessments for use of imazapyr in estuarine and forestry applications, and a comprehensive literature search and review of publications on ecological impacts, toxicity, and fate and transport of imazapyr and its formulations including adjuvants that could potentially be used with imazapyr. From its review of existing scientific data, the Leson & Associates Report concluded that the use of imazapyr and associated surfactants and colorants: would not result in material impacts to estuarine environments or on water quality, because of its rapid degradation and dilution by incoming tides; would not pose significant toxicity concerns for fish, birds or aquatic organisms; would not pose any increased risk to human health and safety; and would pose less effects on the environment than glyphosate because imazapyr and its surfactants are less toxic and imazapyr degrades more readily. The report also noted that in imazapyr has been shown to be a more effective herbicide in treating invasive *Spartina*. This may result in the need for fewer herbicide applications, but may also increase adverse effects on non-target plants in the event of drift or overspray.

Based on these conclusions, Conservancy staff determined that an Addendum to the FEIS/R, rather than a subsequent EIR, was the appropriate vehicle under CEQA to document the change in the ISP Control Program. The proposed Addendum, which is attached as Exhibit 5, details the change to the ISP Control Program associated with the incorporation of imazapyr as an herbicide and details the basis for the conclusion that this change will not result in new or increased significant environmental effects. In brief, that conclusion, which is fully supported by the

Leson & Associates Report, is premised on the lower toxicity of imazapyr and surfactants to animals, its rapid degradation in sunlight, and its greater efficacy, all when compared to glyphosoate. In addition, the Addendum notes that, despite imazapyr's increased effectiveness on non-target plants, because of the lower spray volumes used with imazapyr, and because the mitigation measures adopted by the Conservancy as a condition of approval of the Control Program, impacts due to drift and overspray would not be increased beyond those described in the FEIR/S and would continue to be less than significant, as with the use of glyphosate herbicides.

Accordingly, Conservancy staff recommends that the Conservancy find, for all of the reasons set forth in the Addendum, that the change in ISP Control Program, through the addition of the herbicide imazapyr as a treatment method for invasive *Spartina*, will not give rise to new significant environmental effects not considered in the FEIS/R, nor to a substantial increase in the severity of the significant effects previously identified in the FEIS/R.