

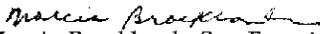
**San Francisco Estuary Project**

01001
2101 Webster St., Ste. 500
Oakland, CA 94612
(510) 286-0460
Fax (510) 286-0928

June 29, 1998

MEMORANDUM

To: CALFED Bay-Delta Program

From: 
Marcia Brockbank, San Francisco Estuary Project for
Association of Bay Area Governments and
Delta Channel Island Work Group

Re: The CALFED Bay-Delta Program Proposal Solicitation (May 1998) for
Ecosystem Restoration Projects and Programs

The Association of Bay Area Governments (ABAG) and the San Francisco Estuary Project, as sponsors for the Delta Channel Islands Work Group are submitting a proposal for the construction phase of a Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands. As requested, please find enclosed ten copies of the proposal.

Enclosures



**CALFED Ecosystem Restoration Proposal Solicitation
May 1998**

I. Title: Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands

Applicant: Association of Bay Area Governments (ABAG) for the San Francisco Estuary Project (SFEP)

ABAG: Eugene Leong, Executive Director P. O. Box 2050, Oakland, Ca 94604-2050 101 8th Street, Oakland, CA 94607 Phone: (510)464-7910 Fax: (510)464-7985 E-mail: eugenel@abag.ca.gov	SFEP: Marcia Brockbank, Prog. Manager 2101 Webster Street, Suite 500 Oakland, CA 94612 Phone: (510)286-0780 Fax: (510)286-0928 E-mail: marciab@abag.ca.gov
--	---

Amount of Funding Requested: \$760,790.

Topic: Floodplain and Habitat Restoration

Geographic Area: Central and West Delta Ecological Unit

Primary Species Addressed: Winter-run Chinook salmon and Delta smelt

Type of Applicant: ABAG is a Joint Powers State Agency - Council of Governments

Type of Project: Implementation

By signing below, the applicant declares the following:

- 1) the truthfulness of all representations in this proposal;
- 2) the individual signing the form is entitled to submit the application on behalf of the applicant;
- 3) the person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section II.K) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

Applicant Authorized Signature:

Eugene N. Leong

Eugene N. Leong, Executive Director

6/27/98

Date



CALFED Ecosystem Restoration Proposal Solicitation
May 1998

II. Executive Summary

A. Project Title: Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands

Applicant: Association of Bay Area Governments (ABAG) for the San Francisco Estuary Project (SFEP)

B. Project Description and Primary Biological/Ecological Objectives

The demonstration project's goals are: 1) to restore and preserve Delta in-channel islands and associated habitats by constructing several small restoration projects that demonstrate and evaluate a variety of biotechnical techniques that can be used for future Delta-wide restoration; and 2) produce a guidebook that will describe the "lessons learned" from the restoration efforts. The San Francisco Estuary Project's Delta Channel Islands work group is sponsoring this demonstration project and is currently carrying out its design and permitting phase - funded by CALFED through a contract with the National Fish and Wildlife Foundation. The work group will continue in an oversight role to provide advice, technical expertise, and review during the construction phase of the project.

The balance of natural erosion and accretion of channel islands has been permanently altered due to artificially regulating the hydrology and, hence, the sediment transport dynamics of the watershed. Additionally, channelizing the Delta's waterways with an extensive levee system has accelerated channel velocities and increased scour in many parts of the Delta. Consequently, channel islands erode quickly and rarely re-form. The demonstration project will result in the protection and restoration of tidally influenced Delta habitats with minimization of impact to existing ecological values. Projects completed in 1994 - 1995 on channel islands around Staten Island demonstrated the ability to restore island land mass and accomplish erosion protection, but raised concerns about over-use of "hard" fixes for such purposes. Building on past experience, this project will focus on using biotechnical techniques for preventing erosion, sediment control, land restoration, and revegetation to accomplish rehabilitation objectives. Other benefits on a programmatic level are the implementation of both CALFED's goals, objectives and actions and the Estuary Project's *Comprehensive Conservation and Management Plan (CCMP)*.

C. Approach/Tasks/Schedule

The approach is a comparative demonstration project that will evaluate cost effectiveness and different types of bio-engineering materials and construction methods for shoreline protection and erosion prevention on channel islands. The project will educate participants and the general public about the benefits and limitations of the techniques used by producing/distributing a guidebook. Tasks include: construction; maintenance; monitoring; and production/distribution of guidebook. The work group is currently applying for required permits under NEPA/CEQA and is beginning the competitive bid process for hiring design engineers. The work group plans to begin the construction phase in the summer of 1999; carry out maintenance and monitoring phases in 1999-2004; and produce and distribute the guidebook during 2000-2001.

D. Justification for Project and Funding by CALFED

Several of CALFED's priority species - Chinook salmon, Delta smelt, Longfin smelt, Sacramento splittail, migratory songbirds, shorebirds, and waterfowl - will benefit from the preservation and enhancement of channel island habitat. According to CALFED's *Ecosystem Restoration Program Plan, Volume I*, "Many of the Delta channels and their midchannel islands and shoals are changing rapidly because of increased wakes from boats

and changes in water velocities." The proposed project's objective is to develop a "suite" of techniques which may be used by agencies, landowners, and non-profit groups to carry out CALFED's *Ecosystem Restoration Program Plan* to "protect existing mid-channel islands and shoals in order to provide high-quality habitat for fish and wildlife dependent on the Bay-Delta." (page 10, Executive Summary and Tables, 4/97); and under Targets, "maintain existing channel islands and restore 50 - 200 acres of high value islands in selected sloughs and channels in each of the Delta's ecological units (200 to 800) acres total." (page 23, Executive Summary).

E. Budget Costs and Third Party Impacts

Total amount requested from CALFED is \$760,790. The total budget for the demonstration project's construction phase, including the work group's share of \$87,818, is \$848,608. The work group already has provided one-time-only funds for project definition, site selection, site inventory (flora/fauna, elevation, soils, etc.), and a conceptual engineering design. The voluntary, consensus-based work group also has provided in-kind services for participation in committees, review of materials, and field trips - about \$100,000 overall. The project will be designed so as to have no adverse impact to ecosystem quality, water quality, water supply reliability, and system vulnerability, and recreation, due to construction methods.

F. Applicant Qualifications

ABAG is a joint powers state agency owned and operated by the cities and counties of the San Francisco Bay Region, organized in 1961 to solve environmental, land use, housing and economic development problems. The agency works cooperatively through interagency agreements, and memoranda of understanding with other regional, state and federal agencies. ABAG serves as the Estuary Project's fiscal agent. The Estuary Project is a joint federal/state/local partnership that was established in 1987 under the Clean Water Act's National Estuary Program to develop the CCMP for the Bay-Delta Estuary. The Estuary Project's purpose is to promote effective management, restore water quality and natural resources, while maintaining economic vitality through implementation of the CCMP. SFEP's committees working with agencies, interest groups and consultants have carried out many demonstration projects over the past 10 years to restore and preserve habitat in the Estuary.

G. Monitoring and Data Evaluation

The monitoring plan's purpose is to evaluate the demonstration project's technological and environmental merits. It will be submitted for approval to CALFED's CMARP and all data will be made available to the IEP or any CALFED designated entity. The work group will review and evaluate the monitoring findings and other criteria such as costs, ease of installation, permitting requirements, and make recommendations for including the information into the guidebook for distribution to the public. Monitoring is directed at understanding existing and future conditions in the Delta and the mechanisms that contribute to the loss of island habitat.

H. Local Support/Coordination with other Programs

The work group has obtained 18 statements of general support for channel islands preservation and enhancement from members of the work group and interested parties (list of signatories attached). Work group members include state/federal agencies, landowners, reclamation districts, environmental and boating groups, and engineering firms. Letters of permission have been obtained from the owners of the project sites. Significant outreach has been accomplished through regular meetings (meeting materials are sent to over 100 interested parties), newsletter and print media articles. Similar projects are discussed at meetings and provide a method for exchanging information, receiving feedback and providing advice on the project.



***CALFED Ecosystem Restoration Projects and Programs
May 1998***

III. Title: Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands

Applicant: Association of Bay Area Governments (ABAG) for the San Francisco Estuary Project (SFEP)

ABAG: Eugene Leong, Executive Director
P. O. Box 2050, Oakland, Ca 94604-2050
101 8th Street, Oakland, CA 94607
Phone: (510)464-7910 Fax: (510)464-7985
E-mail: eugenel@abag.ca.gov

Technical Contact: SFEP: Marcia Brockbank, Program Manager
2101 Webster Street, Suite 500, Oakland, CA 94612
Phone: (510)286-0780 Fax: (510)286-0928
E-mail: marciab@abag.ca.gov

Type of Org: ABAG is a Joint Powers State Agency - Council of Governments

Tax ID #: 94-2832478

Participants and Collaborators: San Francisco Estuary Project's Delta Channel Islands Work Group. Participants include: U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Region 9, CALFED Bay-Delta Program, Calif. Dept. of Fish and Game, Calif. Dept. of Water Resources, Calif. Dept. of Boating and Waterways, State Lands Commission, Delta Protection Commission, landowners, reclamation districts, environmental and boating groups, engineering firms.



IV. Project Description

A. Project Description and Approach

Delta channel islands provide habitat for many special status species and are an important fish and wildlife habitat resource as well as providing other valuable functions, such as recreational, aesthetic and levee protection benefits. The San Francisco Estuary Project's Delta channel islands work group is sponsoring the demonstration project over a two-year period to promote better understanding of the suitability and usefulness of various alternative bio-engineering materials and construction techniques in the preservation, restoration and enhancement of channel islands. The demonstration project will develop a "suite" of techniques which may be used by agencies, landowners and non-profit groups to carry out the CALFED *Ecosystem Restoration Program Plan* to "protect existing mid-channel islands and shoals in order to provide high-quality habitat for fish and wildlife dependent on the Bay-Delta".

The primary objective of the demonstration project is to learn from and build on the work of many others by providing an assessment of proposed sites and conceptual designs for stabilizing islands in the Delta with an emphasis on bio-engineering treatments that improve riparian and aquatic habitat. The approach is a comparative demonstration project using several different types of bio-engineering materials to evaluate construction methods and techniques of shoreline protection and erosion prevention on in-channel islands. The project entails several steps that already have been completed or are in progress including: 1) pre-evaluation of the project sites and base-line habitat valuation (completed); 2) design of a shoreline protection and habitat enhancement component (in-progress and funded by CALFED through a National Fish and Wildlife Foundation contract); 3) environmental review and permitting for the project (in-progress under NFWF); 4) construction/installation; 5) monitoring of the various techniques; 6) evaluation and analysis; 7) maintenance of demonstration projects; and 8) preparation and distribution of a guidebook for future projects based on the evaluation and analysis of the techniques. The work group is requesting funding for Steps 4) through 8) of this project.

IV. B. Scope of Work

The proposed scope of work involves the following elements: construction; monitoring; evaluation of techniques used and their cost effectiveness; maintenance for at least one year; and production and distribution of a guidebook with lessons learned. The work group has identified candidate islands and the sites represent a wide range of field conditions focusing on both habitat and engineering considerations. A variety of innovative biotechnical methods will be used to achieve restoration goals and demonstrate techniques. Example materials are coconut fiber products, brush boxes, live and dead woody stems, pilings and similar structures. Installations will include construction on land and in water and will require appropriate environmental analysis.

Task I. Construction

Subtask A. Administrative/Technical Support for Work Group

The Project Coordinator will develop and distribute meeting agendas, materials, summaries; assist with writing quarterly reports, final reports, and decision memoranda; assist with preparation of presentations to CALFED and other appropriate audiences on the progress of the demonstration project; submit draft and final contract and draft and final subcontracts for approval; and provide oversight of construction contractors, facilitate concerns between work group and contractors. Engineering consultants will provide oversight of construction sites. A contingency fund of ten percent is needed for unanticipated costs due to delays.

Schedule: Meeting organization and distribution of materials

(at least 6 meetings annually)

July 1999 - Jan. 2001

Completion of contracts and subcontracts, submitted for review to NFWF

July 1999 - June 2000

Preparation of quarterly/final reports
 Presentations to CALFED and others

Oct. 1999, January, April,
 July, Oct. 2000; Feb 2001
 July 1999 - June 2000

Deliverables: Meetings, meeting materials and summaries; monthly accounting reports, draft and final contracts, draft and final subcontracts, quarterly and final reports; presentations to CALFED and others as requested.

Subtask B. Little Tinsley Island

This larger in-channel island is currently experiencing erosion primarily due to boat wakes and wind wave forces, although tidal current erosion and weathering of the peat soils are also contributing to bank losses. The demonstration project proposes to use and evaluate several bioengineering alternative techniques such as floating breakwaters and woody plant material along a 600 linear foot shoreline. These techniques will be designed to arrest erosion, protect existing habitat values, and create new habitat areas. Because of its size and other features, Little Tinsley will allow for side-by-side comparisons of a number of techniques, including riprap (that has already been installed by the owner, independent of this demonstration project).

Schedule: Install bioengineering techniques

August - November 1999

Deliverables: Installation of demonstration projects, plans, photos.

Subtask C. Webb Tract Islands

Islands 3, 10 and 21 have been investigated by the work group and consultants as islands that encompass a range of habitat and other site conditions all within close geographic proximity. These are small remnant islands with different surface elevations, vegetation and other habitat conditions, and different erosion control challenges. Methods being explored for these islands include floating breakwaters, plant materials, and various configurations of groins.

Schedule: Install bioengineering techniques

August 1 - Nov. 30, 1999

Deliverables: Installation of demonstration projects, plans, photos.

Estimated Budget:

Project Phase & Task	Direct Labor Hours	Direct Salary & Benefits	Overhead Labor (General Admin & Fee)	Service Contracts	Materials & Acquisition	Misc. Travel Printing Supplies	Costs
Task I. Construction							
Subtask A.							
Admin/Tech	1180 hrs	\$20,873.	\$8,117.	\$ 18,750		\$3,250	\$ 50,990.
Const. Oversight				\$ 66,262			\$ 66,262.
Contingency Fund				\$ 45,000. (10% of construction costs)			\$ 45,000.
Subtask B. Little Tinsley				\$ 27,844.	\$ 67,850.		\$ 95,694.
Subtask C. Webb Tract				\$132,219.	\$155,825		\$288,044.
Task I. Subtotal	1180 hrs	\$20,873.	\$8,117.	\$290,075	\$223,675.	\$3,250.	\$545,990.

Task II. Monitoring

Subtask A. Little Tinsley and Webb Tract Islands Monitoring

The five-year "adaptive monitoring" plan will emphasize habitat monitoring, but will be carried out per the permitting and CMARP requirements. Monitoring elements will include 1) physical/technological evaluations of the different stabilizing methods and biological assessments of vegetation, fauna and special status species. See IV. F - Monitoring and Data Evaluation section.

Schedule: Monitor projects

July 1, 1999 - Dec. 10, 2004

Deliverables: Annual data reports for five years.

Subtask B. Evaluating Bioengineering and Cost Effectiveness

The monitoring of the installed projects will evaluate effectiveness of methods used, cost comparisons, ease of implementation, suitability, benefits to species and habitat (physical and biological monitoring). Monitoring reports will be submitted for five years. Agency staff costs associated with monitoring will be reimbursed. Project Coordinator will assist as needed with monitoring analysis and compiling reports for work group review. Administrative/technical support will be provided to work group as needed.

Schedule:

Compile and analyze monitoring data
Submit reports to CMARP, IEP, etc.

July 1, 1999 - Dec. 10, 2004
Annually

Deliverables: Annual monitoring reports.

Estimated Budget:

Project Phase & Task	Direct Labor Hours	Direct Salary & Benefits	Overhead Labor (General Admin & Fee)	Service Contracts	Material & Acquisition	Misc. Travel Printing Supplies	Costs
Task II. Monitoring							
Subtask A. Monitoring Islands							
Field Crew	1215 hrs (243/hrs per year for 5 years)			\$72,900.	\$12,100.		\$ 85,000.
Subtask B. Evaluation							
Biologist	250 hrs (50/hrs per year for 5 years)			\$15,000.			\$ 15,000.
Proj. Coord.	100 hrs			\$ 3,000.			\$ 3,000.
Acct. Suppt.	280 hrs	\$12,000.	\$2,000.				\$ 14,000.
Task II. Subtotal	1845 hrs	\$12,000.	\$2,000.	\$90,900.	\$12,100.	\$3,000.	\$117,000.

Task III. Maintenance

Subtask A. Administrative/Technical Support for Work Group

Project Coordinator will assist as needed with maintenance and compiling reports for work group review. Administrative/technical support will be provided to work group as needed.

Schedule: Make site visits and schedule appropriate maintenance

Dec. 1999 - Dec. 2004

Deliverables: Document maintenance, report.

Subtask B. Maintenance of Demonstration Projects on all Islands

Installed projects on all islands will be maintained in good, working order for five years.

Schedule: Maintain all installations

Dec. 1999 - Dec. 2004

Deliverables: Well maintained projects.

Estimated Budget:

Project Phase & Task	Direct Labor Hours	Direct Salary & Benefits	Overhead Labor (General Admin & Fee)	Service Contracts	Material & Acquisition	Misc. Travel Printing Supplies	Costs
----------------------------	--------------------------	--------------------------------	---	----------------------	------------------------------	---	-------

Task III. Maintenance						
Subtask A. Admin/Tech						
Proj. Coord.	100 hrs			\$ 3,000.		\$ 3,000.
Accnt. Suppt.	160 hrs	\$5,400.	\$2,600.			\$ 8,000.
Subtask B. Project Maintenance				\$15,000.	\$5,000.	\$20,000.
<hr/>						
Task III. Subtotal	260 hrs	\$5,400.	\$2,600.	\$18,000.	\$5,000.	\$31,000.

Task IV. Guidebook

The guidebook is a key tool for enabling volunteer landowners to more effectively participate in a restoration program. It will describe and evaluate the various techniques, materials, costs, effectiveness and suitability in differing shoreline situations; and will explain the permitting and regulatory process. The guidebook will be a consensus document, reviewed and approved by the work group and participating state/federal agencies for distribution to any member of the public/private sector interested in future Delta in-channel island protection and restoration projects.

Subtask A. Writing and Editing

Working with the work group, a consultant will write and edit at least two drafts and one final guidebook. The format will be easy to read and understandable to the general public.

Schedule: Write 2 drafts and final guidebook

June - November 2000

Deliverables: 2 drafts and final guidebook.

Subtask B. Graphics

Using information from the demonstration projects, a graphic designer will develop tables, graphs, installation diagrams, maps, and charts.

Schedule: Graphics layout completed

December 31, 1999

Camera ready to printer

January 2, 2001

Disk delivered for entering on internet

January 2, 2001

Deliverables: Effective graphics and layout of guidebook.

Subtask C. Print Guidebook

Copies of the draft guidebook will be available for review and comment to the work group and others as appropriate. The final guidebook will be 70-80 pages in length, 2-color format and 1000 copies printed.

Schedule: Guidebook printed

January 2001

Deliverables: 1000 copies printed and ready for distribution.

Subtask D. Internet

Information and completed reports from the demonstration project will be put on the Estuary Project's homepage on the internet and linked to other appropriate agencies, including CALFED and the Delta Protection Commission.

Schedule: Guidebook entered on internet and linked to other agencies

January 2 - 31, 2001

Deliverables: Internet accessible guidebook.

Subtask E. Administration

Administrative tasks will be carried out as necessary in support of developing the guidebook and distributing it to the public.

Schedule: Admin./Tech support provided

June 2000 - Feb.2001

Deliverables: Guidebook produced and distributed to public.

Estimated Budget:

Project Phase & Task	Direct Labor Hours	Direct Salary & Benefits	Overhead Labor (General Admin & Fee)	Service Contracts	Material & Acquisition	Misc. Travel Printing Supplies	Costs
Task IV. Guidebook							
Subtask A. Write guidebook				\$20,000.			\$20,000.
Subtask B. Develop graphics				\$ 6,000.			\$ 6,000.
Subtask C. Print drafts/final						\$12,500.	\$12,500.
Subtask D. Internet		\$ 4,000.					
		\$ 4,000.					
Subtask E. Admin/Tech							
Proj. Coord.	280 hrs			\$ 8,500.		\$ 1,800.	\$10,300.
Acct. Suppt.	280 hrs	\$ 9,400.	\$4,600.				\$14,000.
Task IV. Subtotal	560 hrs	\$13,400.	\$4,600.	\$34,500.		\$14,300.	\$66,800.

IV. C. Location/Geographic Boundaries

The work group has selected four demonstration project sites located within the Central and West Delta Ecological Unit (maps are attached). Little Tinsley Island, San Joaquin County. The demonstration project will take place on 3.5 acres on the eastern portion of the island along 1,500 linear feet of shoreline, where installation of a series of protective measures will allow a comparison of the cost, ease of installation, and effectiveness of bio-engineering construction techniques. The Noble Yacht Group owns the island and written permission for the demonstration project is on file. See maps. Webb Tract Islands, Contra Costa County. The demonstration project will install a variety of techniques on three islands with differing elevation and vegetation type to evaluate cost, ease of installation and effectiveness. Island # 3 has scrub, shrub and palustrine forest, and is 55 ft. by 15 ft.; Island # 10 is a submerged island with little vegetation and is 200 ft by 10 ft.; and Island # 21 is an emergent island with scirpus and is 480 ft. by 80 ft. The Webb Tract Islands are owned by California Dept. of Fish and Game and written permission for the demonstration project is on file. See maps.

IV. D. Expected Benefits

Stressors - Identified primary stressors include: construction of levees on Delta islands/tracts; dredging activities resulting in loss of in-channel islands; invasive aquatic plants; disturbance caused by human activities such as commercial and recreational boating; loss of shallow water habitat due to channel form changes.

Affected Species - These species include: Delta smelt; Longfin smelt; Splittail; Chinook salmon (spring and winter-run); Striped bass; resident fish species; Bay-Delta aquatic food web organisms; Western pond turtle; Shorebird and Wading Bird Guild; Waterfowl; Upland Game Species; and Neotropical Migratory Bird Guild.

Habitat Types - The identified primary habitat types include: mid-channel islands and shoals; tidal perennial aquatic habitat; shaded riverine aquatic; and emergent marsh.

Biological Benefits - The Delta in-channel islands are the last remnants of Delta native habitat, and have been identified as habitat for many rare and endangered plants, fish, insects, amphibians, and birds. The benefits of the proposed project would be the protection and enhancement of these unveeved, tidal habitat areas from erosion and eventual elimination. The proposal includes a monitoring component, which will identify in a more detailed manner the project benefits. The sites

are independent of other land uses and land forms. The demonstration project will have no adverse impacts to water conveyance, flood control, and land uses, such as agriculture, or recreational activities. More importantly, the proposed project will result in demonstrated methods to stabilize or enhance overall Delta habitat.

Other benefits to third parties on a programmatic level are that the demonstration project carries out both CALFED's goals, objectives and actions and the Estuary Project's CCMP. These efforts implement several actions in the CCMP's Aquatic Resources, Wildlife and Wetlands program areas. The proposal demonstrates coordination and effective collaboration among the participating agencies and interest groups. In addition, CALFED and the Estuary Project support clarifying and simplifying the permitting process of constructing environmental protection and enhancement projects. This project will help meet the streamlining goals for projects on Delta in-channel islands and may demonstrate successful implementation of a § 404 Letter of Permission process (U.S. Army Corps of Engineers).

Compatibility with Other Non-Ecosystem CALFED Objectives (water quality, water supply reliability, and Delta levee system integrity) - Precautions will be taken to use best management practices for preventing erosion and resulting sediment problems. A purpose of the project is to retain on-site sediment to maximize shallow water habitat which will minimize sediment loading in the water column. Additionally, a presumed outcome will be increased deposition of sediment at project sites. One of the benefits of protection and enhancement of Delta in-channel islands is the associated protection from erosion to nearby levees. Thus, the proposed project will support CALFED's goal of providing long-term levee stability.

IV. E. Background and Biological/Technical Justification

Background - In 1995, the San Francisco Estuary Project's Delta Geographic Subcommittee determined that there was not consensus on the management of Delta in-channel islands. The committee facilitated a process over the next two years to document the resource problem, institutional and physical impediments to and possible solutions for the preservation and enhancement of Delta in-channel islands. Over 60 people, representing state/federal agencies, local government, landowners, reclamation/flood control districts, environmentalists, scientists, boaters, agricultural interests, and elected officials have participated in the process. They reached consensus on the need for restoring and protecting in-channel islands, agreed upon objectives, and established a work group to carry them out. Meeting regularly, the work group reached agreement on the scope for a demonstration project, selected sites and coordinated early tasks of the project.

Biological/Technical Justification - In-channel islands vary in size and habitat function and value, and in some channels due to their isolation, remain in their historic state. However, in other channels that experience high water velocities due to being a part of the state's water conveyance system, and from heavy use of shipping and boating, the islands are diminishing in both acreage and numbers at a very high rate. (Source: *CALFED's Ecosystem Restoration Program Plan, Volume I*) The ERPP's Implementation Objective, Targets and Programmatic Actions for Midchannel Islands and Shoals calls for "Implementing restoration projects currently proposed in the Delta by resource and cooperating agencies; and Install structures, such as floating booms, to weaken the force of waves to reduce midchannel erosion in sensitive areas." The demonstration project will fulfill the ERPP's Implementation Objective, Target and Action 1A: "Protect and enhance existing remnant channel islands in the Delta; Maintain existing channel islands and restore 50 to 200 acres of high-value islands in selected sloughs and channels in each of the Delta's ecological units; Actively protect and improve existing channel islands in the Delta." The ERPP's Delta smelt Target calls for "meeting the goals of the U.S. Fish and Wildlife Service's *Native Fish Recovery Plan*." The demonstration project will assist in carrying out the Recovery Plan's action to "Develop additional shallow-water habitat, riparian vegetation zones, and tidal marsh." The development and distribution of the guidebook with lessons learned will also implement the

Recovery Plan's call to "Develop a public outreach and education program that increases public awareness of positive effects on healthy fisheries and aquatic habitats." The demonstration project fulfills the Estuary Project's *Comprehensive Conservation and Management Plan* Action AR-4.9: "Promote the maintenance and development of tule islands, tidal wetlands, and offshore berms to protect against erosion and to provide detrital input and juvenile fish nursery habitat." The *Anadromous Fish Restoration Program* states "Improvements to aquatic habitat in the Delta are essential to restore the natural production of anadromous fish in the Central Valley because habitat in the Delta is highly degraded and all species and races of fish use the Delta at some stage in their life history." (See References for page numbers)

Status - The proposed multi-phased demonstration project is underway. The first phase was completed by the work group and included the following tasks: project definition; site selection; and the development of a conceptual design. A \$27,000 site inventory and evaluation was prepared by California State University at Sonoma, Spring 1997 and was funded by the Delta Protection Commission. The conceptual engineering design was completed by the U.S. Army Corps of Engineers Waterway Experimentation Station (WES) at a cost of \$3,800 and was funded by the Corps. The second phase tasks include: environmental review/permitting and design development. CALFED through NFWF is providing \$270,090 and the work group is providing \$180,375 for a total of \$450,465 for this phase. The work group is seeking the required environmental documentation, permits and will begin the engineering design and specs soon. The third and final phase tasks include: construction, maintenance, monitoring and the development and distribution of a guidebook with lessons learned.

IV. F. Monitoring and Data Evaluation

The monitoring plan's purpose is to evaluate the demonstration project's technological and environmental merits. The expected outcome will be the development of criteria and techniques necessary for the achievement of effective resource management within the Delta. The project calls for an "adaptive monitoring" plan that will allow for the maximum use of resources while achieving the documentation necessary for establishing management guidelines. Several different techniques for stabilization will be used and each of these may require different or modified monitoring techniques. The plan will emphasize habitat monitoring, but will be refined through the permitting and consultation process. It may include:

- 1) Physical/technological monitoring of the different stabilizing approaches
 - stable elevation
 - wave reduction at high water conditions and winter storms
 - evaluation of the longevity of structure
 - comparison between structures
- 2) Biological environmental assessment monitoring
 - vegetation
 - species richness, gain or loss of area, establishment or failure of members of the shrub/scrub habitat or palustrine forest habitat
 - fauna terrestrial or above the water
 - fauna subtidal
 - special status species
 - it is known that special status species occur at the project sites and they will be included in monitoring efforts, however, the project's goal is for ecosystem improvement and to look beyond individual organisms

Monitoring will take place for a period of five years and may include permanent photo stations, physical and biological parameters, and will be used in analyzing the effects of techniques used at the demonstration sites for stabilizing the island and facing levee. Biological monitoring may

include: vegetation recovery, benthic organisms occupying the sites, wildlife use, fisheries resources, and if they occur, analysis of the invasion by non-native species. Physical monitoring may include: water level, subsidence, substrate accretion, and wave action. No alternative monitoring methods have been identified. There may be a need to evaluate the project on its "environmental friendliness" and its "recreational/aesthetic friendliness".

At the end of the first full year of monitoring, the work group will review and evaluate the findings, and other criteria such as costs, ease of installation, and permitting requirements to be included in the guidebook. All monitoring data will be made available to the Interagency Ecological Program's monitoring efforts through participating members of the work group's project development subcommittee. The subcommittee will provide general technical expertise, review of data and oversight of the demonstration project. A list of subcommittee members is included in *Section VI - Applicant Qualifications*.

IV. G. Implementability

The work group has obtained letters of permission from the following entities: State Lands Commission; California Dept. of Fish and Game (the owner of Webb Tract islands); and Noble Yacht Group (the owner of Little Tinsley Island). The land managers of Webb Tract are fully supportive of actions to protect and enhance the Webb Tract in-channel islands (Contact: John Winther, Delta Wetlands, 510/282-4216). Additionally, the work group has obtained 18 statements of general support for in-channel island protection and enhancement from members of the work group and interested parties (see attached list of Coordination of Efforts signatories). Considerable outreach has been accomplished through the Estuary Project's mailing list, its newsletter and the print media. The work group has met often for the past two-years and the meeting materials are sent to about 100 individuals/entities each time. Attendance at the meeting ranges from 20 - 35 people. The work group's activities have been discussed in articles in the Stockton Record and the Contra Costa Times.

The work group submitted its information at a pre-application meeting with state/federal agencies in April 1998 and is currently in the process of providing additional materials and undergoing review of the demonstration project by the appropriate agencies. By working with state/federal agencies as members of the work group in the site selection and design phase, the work group anticipates the possible use of a § 404 Letter of Permission in obtaining the necessary permits. Regulatory agencies participating in the work group since its beginning are U.S. Fish and Wildlife Service, National Marine Fisheries Service, U.S. Army Corps of Engineers, Dept. of Fish and Game, State Lands Commission and the Dept. of Boating and Waterways. Approvals needed include: Corps of Engineers; Dept. of Fish and Game; State Lands Commission; and the Central Valley Regional Water Quality Control Board.

References

- ABAG 1993. San Francisco Estuary Project. Comprehensive Conservation and Management Plan. Oakland, Calif. 86 pp.
- CALFED. 1998. Ecosystem Restoration Program Plan, Volume I. Visions for Ecosystem Elements. Sacramento, Calif. 91-92 pp.
- CALFED. 1998. Ecosystem Restoration Program Plan, Volume II. Visions for Ecosystem Elements. Sacramento, Calif. 48-49 pp. 64 pp.
- U.S. Fish and Wildlife Service. 1995 a. Sacramento-San Joaquin Delta Native Fishes Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon. 140 pp.
- U.S. Fish and Wildlife Service. 1995 b. Sacramento-San Joaquin Delta Native Fishes Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon. 161 pp.
- U.S. Fish and Wildlife Service. 1997. Anadromous Fish Restoration Program. U. S. Fish and Wildlife Service, Stockton, Calif. 96 pp.

V. A - *Estimated Budget Costs*- Quarterly Payments are requested from CALFED and monthly accounting reports will be submitted to CALFED from ABAG/SFEP.

Project Phase & Task	Direct Labor Hours	Direct Salary & Benefits	Overhead Labor (General Admin & Fee)	Service Contracts	Materials & Acquisition	Misc. Travel Printing Supplies	Costs
Task I. Construction							
Subtask A.							
Admin/Tech	1180 hrs	\$20,873.	\$8,117.	\$ 18,750		\$3,250	\$ 50,990.
Const. Oversight				\$ 66,262			\$ 66,262.
Contingency Fund				\$ 45,000. (10% of construction costs)			\$ 45,000.
Subtask B. Little Tinsley				\$ 27,844.	\$ 67,850.		\$ 95,694.
Subtask C. Webb Tract				\$132,219.	\$155,825		\$288,044.
Task I. Subtotal	1180 hrs	\$20,873.	\$8,117.	\$290,075	\$223,675.	\$3,250.	\$545,990.
Estimated Work Group Share Task I - Support provided by work group members for technical review/advice attendance at least 12 meetings by 12 members (\$60/hr X 576 hrs = \$34,560); Administrative in-kind @\$1000 X 18 mo by SF Bay RWQCB plus postage (\$19,000); ABAG in-kind acct/manag support (\$16,258). Total \$69,818.							
Task II. Monitoring							
Subtask A. Monitoring Islands							
Field Crew	1215 hrs (243/hrs per year for 5 years)			\$72,900.	\$12,100.		\$ 85,000.
Subtask B. Evaluation							
Biologist	250 hrs (50/hrs per year for 5 years)			\$15,000.			\$ 15,000.
Proj. Coord.	100 hrs			\$ 3,000.			\$ 3,000.
Acct. Suppt.	280 hrs	\$12,000.	\$2,000.				\$ 14,000.
Task II. Subtotal	1845 hrs	\$12,000.	\$2,000.	\$90,900.	\$12,100.	\$3,000.	\$117,000.
Estimated Work Group Share Task II - Support provided by work group members for technical review/advice. Total \$3,000.							
Task III. Maintenance							
Subtask A. Admin/Tech							
Proj. Coord.	100 hrs			\$ 3,000.			\$ 3,000.
Acct. Suppt.	160 hrs	\$5,400.	\$2,600.				\$ 8,000.
Subtask B. Project Maintenance							
				\$15,000.	\$5,000.		\$20,000.
Task III. Subtotal	260 hrs	\$5,400.	\$2,600.	\$18,000.	\$5,000.		\$31,000.
Estimated Work Group Share Task III - Support provided by work group members for technical review/advice. Total \$3,000.							
Task IV. Guidebook							
Subtask A. Write guidebook							
				\$20,000.			\$20,000.
Subtask B. Develop graphics							
				\$ 6,000.			\$ 6,000.
Subtask C. Print drafts/final							
					\$12,500.		\$12,500.
Subtask D. Internet							
		\$ 4,000.					\$ 4,000.
Subtask E. Admin/Tech							
Proj. Coord.	280 hrs			\$ 8,500.		\$ 1,800.	\$10,300.
Acct. Suppt.	280 hrs	\$ 9,400.	\$4,600.				\$14,000.
Task IV. Subtotal	560 hrs	\$13,400.	\$4,600.	\$34,500.		\$14,300.	\$66,800.
Estimated Work Group Share Task IV - Support provided by work group members for reviewing all products. Total \$12,000.							
						Total	\$ 87,818.
Total Work Group Share							
Total amount requested from CALFED							\$760,790.

**DELTA IN-CHANNEL ISLAND DEMONSTRATION PROJECT
CONSTRUCTION COST ESTIMATES**

SITE	TREATMENT	AMOUNT	MATERIALS (\$)	LABOR (HRS)	LABOR (\$)
Little Tinsley	Log Module	500 feet	\$25,000	250	\$6750
	Anchors	50 units	\$15,000	50	\$1350
	Coir fascine	1000 feet	\$15,000	225	\$6075
	Willow posts	300 units	0	30	\$810
	Willow wattling	500 feet	0	100	\$2700
	Willow cuttings	500 feet	\$1000	50	\$1350
	Plant rolls	500 feet	\$1000	50	\$1350
	Plant seedlings	2000 units	\$2000	70	\$1890
Webb Tract #3	Peaked stone dike (groins) - labor & materials	200 feet (100 tons)	0	0	\$35,000
	Log Module	500 feet	\$25,000	250	\$6750
	Anchors	50 units	\$15,000	50	\$1350
	Plant rolls	500 feet	\$1000	50	\$1350
	Willow posts	100 units	0	10	\$270
	Willow wattling	200 feet	0	40	\$1080
	Willow cuttings	1000 units	0	25	\$675
	Webb Tract #21	Trees (as breakwater)	4000 feet	0	300
Anchors		200 units	\$60,000	200	\$5400
Webb Tract #10	Log module	500 feet	\$25,000	250	\$6750
	Coir fascine	500 feet	\$7500	115	\$3105
	Plant seedlings	1000 units	\$2000	35	\$945
	Peaked stone dikes (groins)	200 feet (100 tons)	0	0	\$35,000
SUBTOTAL			\$194,500	2150	\$128,050
ADMIN., O&L & FEE OVERSITE			+15% = \$223,675		+25% = \$160,063
TOTAL			\$450,000		\$66,262

V. B - Schedule Milestones Table

Task I - Construction

Subtask A. Administrative/Technical Support for Work Group

Meeting organization and distribution of materials
at least 6 meetings annually)

July 1999 - Jan. 2001

Completion of contracts and subcontracts, submitted
for review to NFWF

July 1999 - June 2000

Preparation of quarterly/final reports

Oct. 1999, January, April,

July, Oct. 2000; Feb 2001

Presentations to CALFED and others

July 1999 - June 2000

Subtask B. Little Tinsley

Install bioengineering techniques

August - November 1999

Subtask C. Webb Tract

Install bioengineering techniques

August - November 1999

Task II - Monitoring

Subtask A. Little Tinsley

Monitor projects

July 1, 1999 - Dec. 10, 2004

Subtask B. Webb Tract

Monitor projects

July 1, 1999 - Dec. 10, 2004

Subtask C. Evaluation

Compile and analyze monitoring data

Annually, 1999-2004

Submit reports to CMARP, IEP, etc.

Annually, 1999-2004

Task III - Maintenance

Subtask A. Administrative/Technical Support

Make site visits and schedule appropriate maintenance

Dec. 1999 - Dec. 2004

Subtask B. Maintenance of Projects

Maintain all installations

Dec. 1999 - Dec. 2004

Task IV - Guidebook

Subtask A. Write Guidebook

Write 2 drafts and final

June 1 - Nov. 2000

Second draft reviewed with graphics

October 2000

Subtask B. Graphics

Develop graphics/tables/figures

Sept. - Nov. 2000

To graphics designer for final layout

December 1, 2000

Subtask C. Printing

To printer

January 4, 2001

Subtask D. Internet Entry/maintenance

Post on internet and link to other entities

Jan. - Feb. 2001

Subtask E. Administrative/Technical Support

Distribute drafts to work group for review/comment

July - Nov. 2000

Develop strategy to distribute Guidebook

Oct. 2000 - Jan. 2001

Distribute Guidebook

Feb. 1, 2001

V. C - Third Party Impacts

As mentioned in Section IV. D. - Expected Benefits, the project will be constructed so as to have no adverse impacts to water quality or water supply reliability due to construction methods. The sites are independent of other land uses and land forms and would have no adverse impacts to water conveyance, flood control land uses such as agriculture, levee stability, or recreational activities. Precautions will be taken to use best management practices for preventing erosion and resulting sediment problems. A purpose of the project is to retain on-site sediment to maximize shallow water habitat which will minimize sediment loading in the water column.

VI. Applicant Qualifications

ABAG and the San Francisco Estuary Project

ABAG is owned and operated by the cities and counties of the San Francisco Bay Region. It was organized in 1961 under the Joint Exercise of Powers Act [California government Code Section 6500 et seq.] to help solve problems in areas such as land use, transportation, environmental quality, housing and economic development. It is designated for planning purposes under several federal and California state laws, and serves as the area-wide clearinghouse for federal Executive Order 12372

The Association is governed by a General Assembly representing city and county officials, and has a 38-member Executive Board of county supervisors, mayors and city council members. The Executive Board provides policy direction to its committees and staff between meetings of the General Assembly. ABAG works cooperatively through interagency agreements and memoranda of understanding with other regional and state and federal agencies.

The San Francisco Estuary Project (SFEP) is a joint state/federal/local partnership that was established in 1987 under the Clean Water Act's National Estuary Program to develop and implement the Comprehensive Conservation and Management Plan (CCMP) for the Bay-Delta Estuary. SFEP's purpose is to develop effective management, restore water quality and natural resources, while maintaining economic vitality through the implementation of the CCMP. The CCMP's nine program areas and 145 actions recognize the Estuary's environmental value and the need to manage habitats within the sub-watersheds from an ecosystem perspective.

SFEP is housed within the San Francisco Bay Regional Water Quality Control Board, which was designated as the lead agency for implementing the CCMP; and ABAG acts as SFEP's fiscal agent. SFEP's committees working with agencies, interest groups and consultants have carried out many demonstration projects over the past years to restore and preserve habitat in the Bay-Delta Estuary. Some of these include the following projects: Alameda Creek Watershed Resource Management; Citizen Monitoring of Streams at Coyote Creek Riparian Station; Wildcat Creek and San Pablo Creek Habitat Restoration; Regional Inventory of Fishes and Riparian Habitat; and Wildcat Creek Grazing Management in Contra Costa County. ABAG is the fiscal agent for the Bay Trail Project, a multi-million dollar project to build a public access trail around the San Francisco Bay. Reports of these projects are available upon request.

Project Organization

The San Francisco Estuary Project - The Estuary Project has taken the lead responsibility for organizational and administrative tasks for the work group since its inception, and the Estuary Project will continue in this role for the demonstration project. Marcia Brockbank, SFEP Program Manager will serve as the Technical Contact and overall manager for the demonstration projects, with responsibilities for contract management. She is an ABAG employee on an intergovernmental personnel assignment to the San Francisco Bay Regional Water Quality Control Board. She has been with the Estuary Project since 1987 and the Program Manager since 1994. She has overseen a wide array of consensus-based activities aimed at implementing the 145 actions in the CCMP.

She received her BA from the University of Utah.

Core Group - Estuary Project staff work closely with a small core group, that serves as an informal executive committee to assist with the development of meeting agendas and materials. These members are: Rick Morat, US Fish and Wildlife Service; Margit Aramburu, Delta Protection Commission; Ed Littrell, Calif. Dept. of Fish and Game; Diana Jacobs, State Lands Commission; and Curt Schmutte or Kent Nelson, Dept. of Water Resources.

Channel Island Work Group - Margit Aramburu, Delta Protection Commission Executive Director serves as the Chair of the work group. Work group members (see below for list of members) will provide technical and scientific review/expertise (in-kind) and will serve as the hands-on oversight body for the demonstration project.

Work group members include: Rick Morat and Matt Vandenberg, US Fish and Wildlife Service; Margit Aramburu, Delta Protection Commission; Frank Gray, Ed Littrell, and Pat Brantley, Calif. Dept. of Fish and Game; Diana Jacobs and Jane Sekelsky, State Lands Commission; Curt Schmutte and Kent Nelson, Dept. of Water Resources; Karen Shaffer and Lynn O'Leary, US Army Corps of Engineers; Luisa Valiela, US EPA, Region 9; Bill Curry, Dept. of Boating and Waterways; Richard Nichols, EIP Assoc.; Phil Schaefer, Pacific Inter Club Yachting Assoc.; Gil Labrie, DCC Engineering; Chris Kjeldsen, Sonoma State Univ.; Andrew Leiser, Prof. Emeritus, UC Davis (EIP); Ken Kjeldsen and Jerry Hadley, Kjeldsen, Sinnock & Neudeck, Inc.; Gilbert Cosio and Mark Fortner, Murray, Burns & Kienlen; Earl Cooley, Medford Island; Jeremy Thomas, Natural Heritage Inst.; and those attending but not on a regular basis; Gary Tilkian, Metropolitan Water Dist.; Elaine Archibald, CUWA; Chris Mobley, National Marine Fisheries Service.

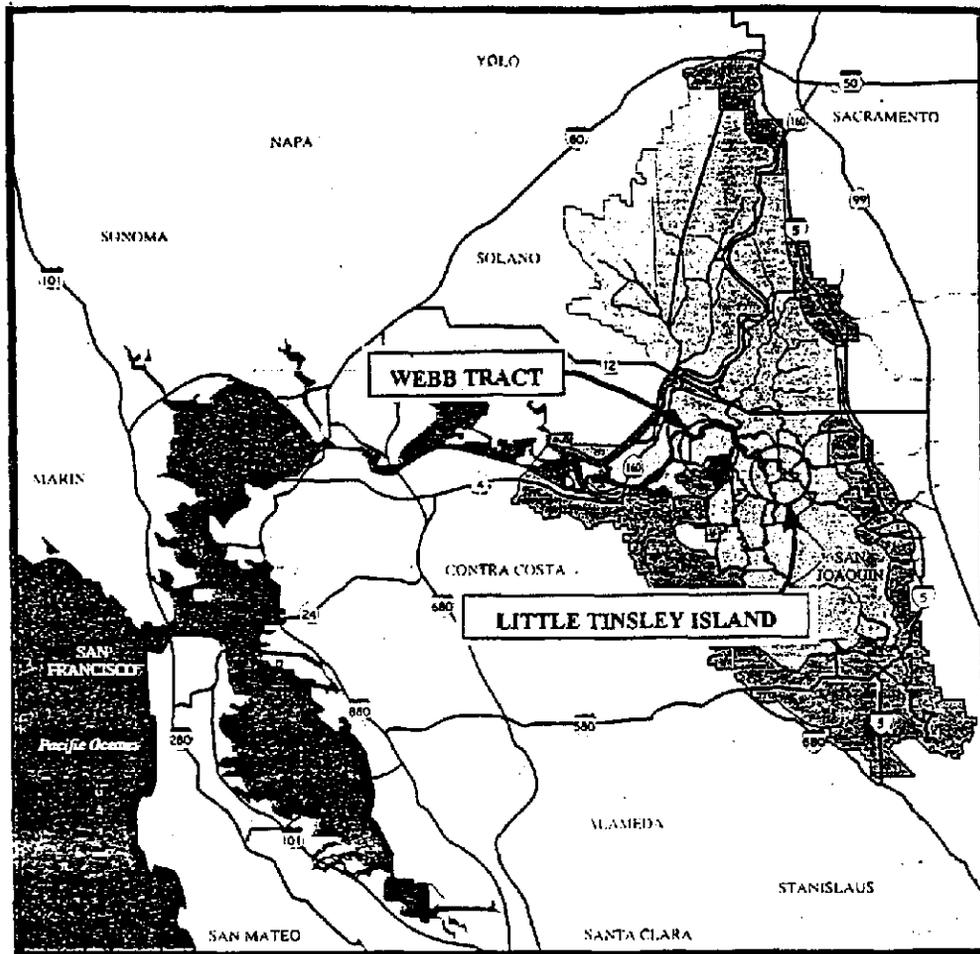
Project Coordinator - The Project Coordinator's responsibilities are to: oversee environmental documentation and project design; oversee the day-to-day progress of contractors; brief work group on progress of project; mediate issues that develop between contractors and group; assist with developing/writing proposals for funding implementation/construction phase of project; and assist with writing quarterly/annual reports requires for project.

ABAG - ABAG will serve as the fiscal agent for the demonstration project, and ABAG staff will provide 2.5 percent in-kind accounting, managerial and administrative support in the amount of \$15,670. Staff include: Gary Binger, Planning Director and SFEP Liaison; Joe Chan, Finance Director; Terry Bursztynsky, Environmental Management Director; Marcia Brockbank, SFEP Program Manager, Liz Blair, Communications Officer; and Marcie Adams, Communications Officer.

Consultants - Through ABAG's competitive bid process, consultants will be used for developing engineering designs, monitoring plans, and construction and installation of the demonstration project. Consultants will also be used in the development and production of the guidebook.

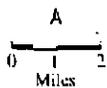
VII. Compliance

ABAG acting as the San Francisco Estuary Project's fiscal agent can comply with the terms and conditions described in the request for proposals. We are submitting the required signed forms (Forms are attached).

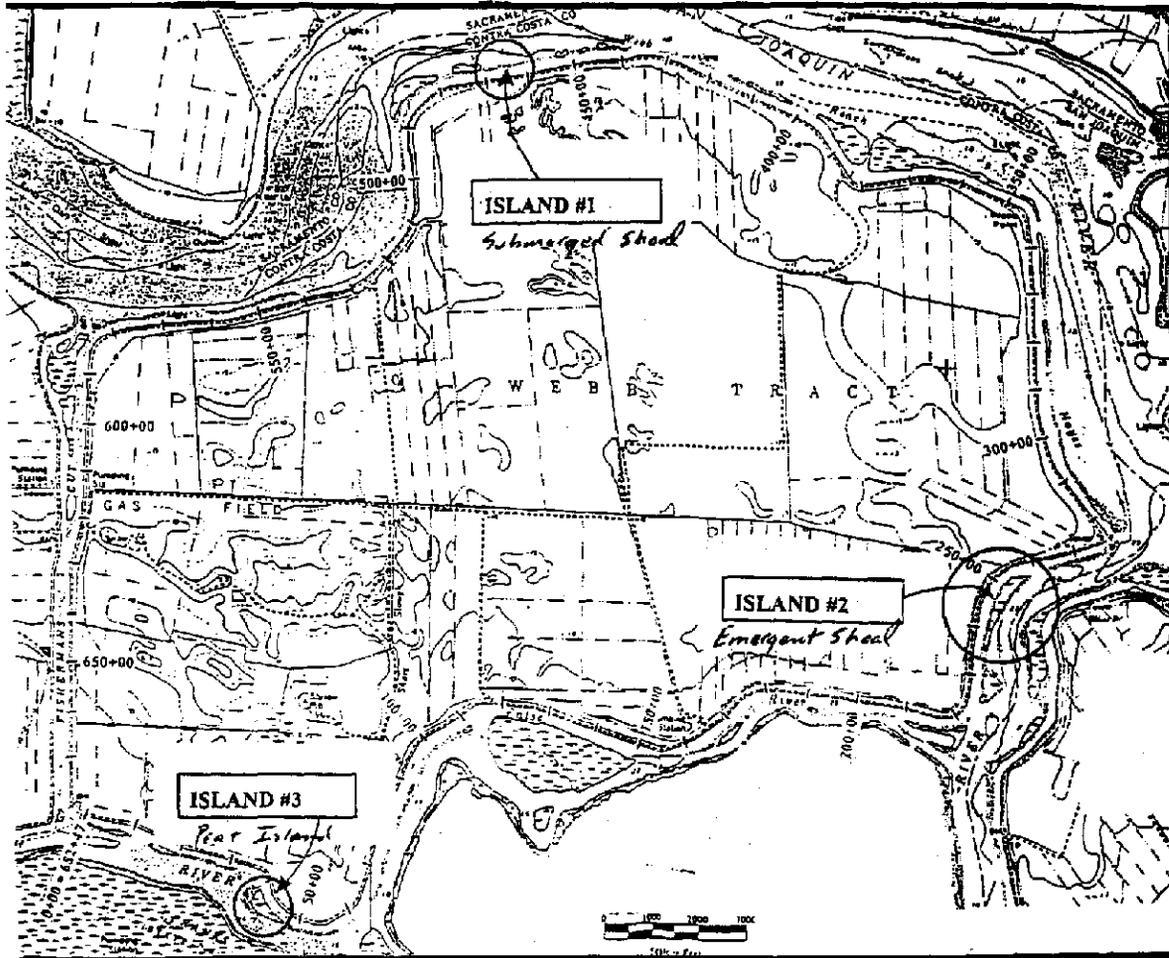


LEGEND

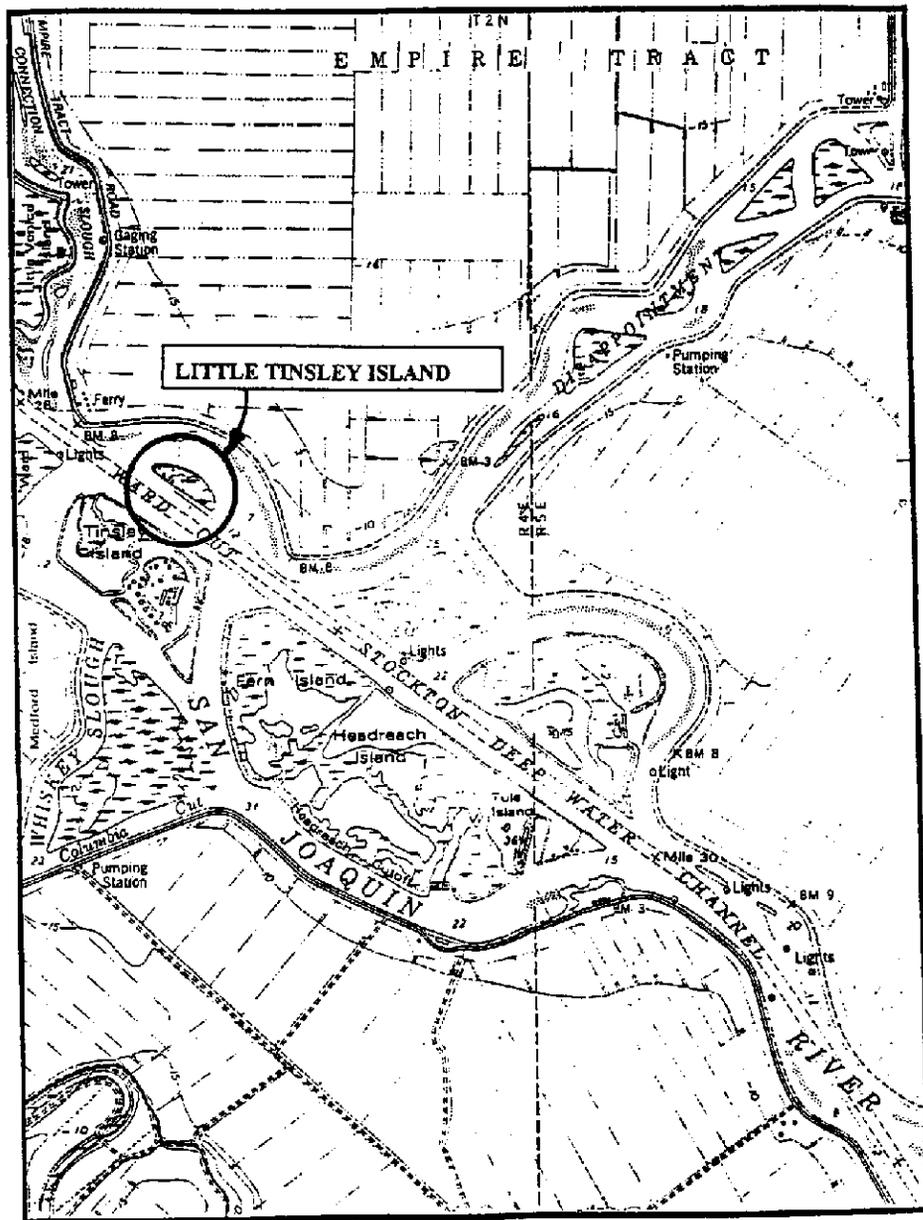
- Primary Zone
- Secondary Zone



REGIONAL LOCATION MAP



WEBB TRACT



COORDINATION OF EFFORTS TO PROMOTE THE CONSERVATION AND RESTORATION OF SACRAMENTO-SAN JOAQUIN DELTA IN-CHANNEL ISLANDS

WHEREAS, natural Delta in-channel islands are an important fish and wildlife habitat resource, and provide habitat for many special status species;

WHEREAS, many Delta in-channel islands provide for other valuable functions such as recreational, aesthetic and levee protection benefits;

WHEREAS, many Delta in-channel islands are diminishing in both acreage and numbers at an unacceptably high rate;

WHEREAS, it appears that it is the unanimous desire of all interests that the Delta would benefit ecologically from the conservation and restoration of the in-channel islands;

WHEREAS, the geographic scope of this agreement has been set as the legal Delta;

WHEREAS, all interests acknowledge that there are other beneficial uses of the Delta, such as water conveyance and recreation, it is the desire of all interests that Delta in-channel islands be conserved and restored to acreage and sites that maximize their ecological benefits, while considering other beneficial uses;

THEREFORE, parties signatory to this agreement (may consist of agencies, non-governmental organizations, governmental bodies, individuals/landowners, and others) agree to work together to reach and implement the goal of halting the decline and degradation of, and working toward the restoration of Delta in-channel islands.

It is envisioned that this goal would be furthered by efforts to promote the following objectives:

Identify conservation and restoration techniques appropriate to site conditions and resource needs;

Identify sites/locales where objectives differ;

Identify work windows (periods to minimize adverse impacts of restoration work activities);

Identify concerns and strategies for surface elevation (relationship to sea-level) objectives;

Identify vegetation objectives;

Address mitigation concerns with respect to conservation/restoration activities, multiple resource value considerations, and the issue of projects serving as mitigation banks for other projects;

Identify incentive strategies for voluntary implementation;

Identify means to improve regulatory and permitting processes to facilitate achievement of resource objectives;

Identify potential funding and in-lieu resources to maximize partnerships/collaboration, and;

Develop a tool such as a channel islands restoration and management manual supportive of the ecosystem functions.

This agreement is not in any way binding. Signatories may enter without constraint and remove themselves by a simple letter noting such to the San Francisco Estuary Project (SFEPP). It is hoped those parties committed to collaborative efforts will participate appropriately.

SIGNATORIES

Signature over printed name/dates.

**Coordination of Efforts to Promote the Conservation and Restoration of
Sacramento-San Joaquin Delta In-Channel Islands**

COORDINATION OF EFFORTS

**List of Signatories
as of May 1, 1997**

Bouldin Farming Company
California Urban Water Agencies
CA Dept. of Water Resources
CA State Lands Commission
CALFED Bay-Delta Program
Delta Protection Commission
Delta Wetlands
EIP Associates
Medford Island Habitat Conservation Area
National Marine Fisheries Service
Natural Heritage Institute
Reclamation District 756
Reclamation District 2026
Reclamation District 2028
San Francisco Estuary Project
San Joaquin Audubon Society
U.S. Fish and Wildlife Service
U.S. Environmental Protection Agency, Region 9

**Certifications Regarding Debarment, Suspension and
Other Responsibility Matters, Drug-Free Workplace
Requirements and Lobbying**

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used or use this form for certification and sign. (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

CHECK IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

CHECK IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

01-2810
June 1995
(This form replaces 01-1952, 01-1964,
01-1988, 01-1989 and 01-1993)

PART C: Certification Regarding Drug-Free Workplace Requirements

CHECK IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL

Alternate I. (Grantees Other Than Individuals)

A. The grantee certifies that it will or continue to provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an ongoing drug-free awareness program to inform employees about—
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will —
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification numbers(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted —
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a) (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

Check if there are workplaces on file that are not identified here.

PART D: Certification Regarding Drug-Free Workplace Requirements

CHECK IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL

Alternate II. (Grantees Who Are Individuals)

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

PART E: Certification Regarding Lobbying
Certification for Contracts, Grants, Loans, and Cooperative Agreements

CHECK IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT; SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

CHECK IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.


SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

Eugene Y. Leong, Executive Director

TYPED NAME AND TITLE

DATE

Figure 5
Standard Form 424D

OMB Approval No. 0348-0042

ASSURANCES — CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0042), Washington, DC 20503

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET, SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability, (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal interest in the title of real property in accordance with awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.
4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.
6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§ 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§ 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.
10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686) which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794) which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101-6107) which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 93-255), as amended, relating to non-discrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to non-discrimination in the sale, rental or financing of housing; (i) any other non-discrimination provisions in the specific statute(s) under which application for Federal assistance is being made, and (j) the requirements on any other non-discrimination Statute(s) which may apply to the application.

Previous Edition Usable

Figure 3
Standard Form 424D (cont'd.)

11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§ 276a to 276a-7), the Copeland Act (40 U.S.C. § 276c and 18 U.S.C. § 874), the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333) regarding labor standards for federally assisted construction subagreements.
14. Will comply with the flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. § 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§ 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470), EO 11593 (identification and preservation of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. § 469a-1 et seq.).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984.
19. Will comply with all applicable requirements of all other Federal laws, Executive Orders, regulations and policies governing this program.

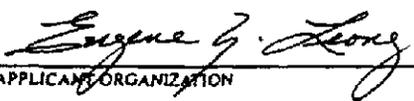
SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL 	TITLE Executive Director
APPLICANT ORGANIZATION Association of Bay Area Governments	DATE SUBMITTED 6/29/98

Figure 4
Standard Form 424C

OMB Approval No. 0348-0041

BUDGET INFORMATION — Construction Programs

NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation, if such is the case you will be notified.

COST CLASSIFICATION		a. Total Cost	b. Costs Not Allowable for Participation	c. Total Allowable Costs (Column a-b)
1.	Administrative and legal expenses	\$ 139,040 .00	\$.00	\$.00
2.	Land, structures, rights-of-way, appraisals, etc.	\$ - 0 - .00	\$.00	\$.00
3.	Relocation expenses and payments	\$ - 0 - .00	\$.00	\$.00
4.	Architectural and engineering fees	\$ - 0 - .00	\$.00	\$.00
5.	Other architectural and engineering fees	\$ - 0 - .00	\$.00	\$.00
6.	Project inspection fees	\$ 66,262 .00	\$.00	\$.00
7.	Site work	\$ 72,900 .00	\$.00	\$.00
8.	Demolition and removal	\$ - 0 - .00	\$.00	\$.00
9.	Construction	\$ 403,738 .00	\$.00	\$.00
10.	Equipment	\$ 12,100 .00	\$.00	\$.00
11.	Miscellaneous	\$ 21,750 .00	\$.00	\$.00
12.	SUBTOTAL (sum of lines 1-11)	\$ 715,790 .00	\$.00	\$.00
13.	Contingencies	\$ 45,000 .00	\$.00	\$.00
14.	SUBTOTAL	\$ 760,790 .00	\$.00	\$.00
15.	Project (program) income	\$ - 0 - .00	\$.00	\$.00
16.	TOTAL PROJECT COSTS (subtract #15 from #14)	\$ 760,790 .00	\$.00	\$.00
FEDERAL FUNDING				
17.	Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share) Enter the resulting Federal share.	Enter eligible costs from line 16c. Multiply X ____ %		\$.00

Previous Edition Usable

Authorized for Local Reproduction

Standard Form 424C (Rev. 4-73)
Prescribed by OMB Circular A-102

1-008693

1-008693