Demonstration Project for the Protection and Enhancement of Essential Fish and Wildlife Habitat at Rhode Island, Contra Costa County, Ca.

Project Information

1. **Proposal Title:**

   Demonstration Project for the Protection and Enhancement of Essential Fish and Wildlife Habitat at Rhode Island, Contra Costa County, Ca.

2. **Proposal applicants:**

   Eugene Leong, Association of Bay Area Governments (ABAG)

3. **Corresponding Contact Person:**

   Todd Gardner
   Department of Fish and Game
   CDFG - Region 2 1701 Nimbus Rd. Suite A Rancho Cordova, Ca. 95670
   916 358-2887
   tgardner@dfg.ca.gov

4. **Project Keywords:**

   At-risk species, fish
   Endangered Species
   Habitat Restoration, Estuarine shallow water

5. **Type of project:**

   Planning

6. **Does the project involve land acquisition, either in fee or through a conservation easement?**

   No

7. **Topic Area**:

   Shallow Water, Tidal and Marsh Habitat

8. **Type of applicant:**

   Local Agency

9. **Location - GIS coordinates:**

Latitude:	38.0012
Longitude:	-121.5734
Datum:	NAD27

Describe project location using information such as water bodies, river miles, road intersections, landmarks, and size in acres.

Rhode Island is a permanently flooded island located in Contra Costa County, within Ecological Unit 1.4 of the western-central Sacramento - San Joaquin Delta (the Delta) of California, and is located within the Bouldin Island and Woodward Island 7.5 minute, 1:24,000 scale, USGS Quadrangle Maps. The island is located east of Holland Tract, south of Little Mandeville Island, and west of Bacon island, within the Old River System of the Delta.

10. **Location - Ecozone:**

    1.4 Central and West Delta

11. **Location - County:**

    Contra Costa

12. **Location - City:**

    Does your project fall within a city jurisdiction?

    No

13. **Location - Tribal Lands:**

    Does your project fall on or adjacent to tribal lands?

    No

14. **Location - Congressional District:**

    10

15. **Location:**

    California State Senate District Number: 07

    California Assembly District Number: 11

16. **How many years of funding are you requesting?**

    2

17. **Requested Funds:**
    a) Are your overhead rates different depending on whether funds are state or federal?

    No

    If no, list single overhead rate and total requested funds:

    Single Overhead Rate: 40.14

    Total Requested Funds: 500,000

b) Do you have cost share partners already identified?

Yes

If yes, list partners and amount contributed by each:

ABAG - Delta In-Channel Islands Workgroup $12,500 in kind services

c) Do you have potential cost share partners?

No

d) Are you specifically seeking non-federal cost share funds through this solicitation?

No

If the total non-federal cost share funds requested above does not match the total state funds requested in 17a, please explain the difference:

18. **Is this proposal for next-phase funding of an ongoing project funded by CALFED?**

Yes

If yes, identify project number(s), title(s) and CALFED program (e.g., ERP, Watershed, WUE, Drinking Water):

C1106	**Rhode Island Floodplain Management and habitat Restoration Project**	**ERP**

Have you previously received funding from CALFED for other projects not listed above?

Yes

If yes, identify project number(s), title(s) and CALFED program.

97-N11	**Phase I Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands (Design and Permitting)**	**Ecosystem Restoration Program**
ERP 01-N13	**Phase II Demonstration Projects for the Protection and Enhancement of Delta In-Channel Islands (Construction and Monitoring)**	**Ecosystem Restoration Program**

19. **Is this proposal for next-phase funding of an ongoing project funded by CVPIA?**

    No

    Have you previously received funding from CVPIA for other projects not listed above?

    No

20. **Is this proposal for next-phase funding of an ongoing project funded by an entity other than CALFED or CVPIA?**

    No

    Please list suggested reviewers for your proposal. (optional)

21. **Comments:**

Environmental Compliance Checklist

Demonstration Project for the Protection and Enhancement of Essential Fish and Wildlife Habitat at Rhode Island, Contra Costa County, Ca.

1. **CEQA or NEPA Compliance**
   a) Will this project require compliance with CEQA?

      Yes
   b) Will this project require compliance with NEPA?

      Yes
   c) If neither CEQA or NEPA compliance is required, please explain why compliance is not required for the actions in this proposal.

2. **If the project will require CEQA and/or NEPA compliance, identify the lead agency(ies).** *If not applicable, put "None".*

   CEQA Lead Agency: California Department of Fish and Game
   NEPA Lead Agency (or co-lead:) ?
   NEPA Co-Lead Agency (if applicable):

3. **Please check which type of CEQA/NEPA documentation is anticipated.**

   CEQA
   -Categorical Exemption
   XNegative Declaration or Mitigated Negative Declaration
   -EIR
   -none

   NEPA
   -Categorical Exclusion
   XEnvironmental Assessment/FONSI
   -EIS
   -none

   If you anticipate relying on either the Categorical Exemption or Categorical Exclusion for this project, please specifically identify the exemption and/or exclusion that you believe covers this project.

4. **CEQA/NEPA Process**
   a) Is the CEQA/NEPA process complete?

      No

      If the CEQA/NEPA process is not complete, please describe the dates for completing draft and/or final CEQA/NEPA documents.

      It is anticipated that the Draft Initial Study/Enironmental Assessment will be complete by October 2003, and the Final Negative Declaration/Finding of No Significant Impact will be complete by April 2004.

b) If the CEQA/NEPA document has been completed, please list document name(s):

5. **Environmental Permitting and Approvals** (*If a permit is not required, leave both Required? and Obtained? check boxes blank.*)

LOCAL PERMITS AND APPROVALS

Conditional use permit

Variance

Subdivision Map Act

Grading Permit

General Plan Amendment

Specific Plan Approval

Rezone

Williamson Act Contract Cancellation

Other

STATE PERMITS AND APPROVALS

Scientific Collecting Permit	Required, Obtained
CESA Compliance: 2081	Required, Obtained
CESA Compliance: NCCP	Required, Obtained
1601/03	Required, Obtained
CWA 401 certification	Required, Obtained
Coastal Development Permit	
Reclamation Board Approval	Required, Obtained
Notification of DPC or BCDC	
Other	

FEDERAL PERMITS AND APPROVALS

ESA Compliance Section 7 Consultation	Required
ESA Compliance Section 10 Permit	Required, Obtained
Rivers and Harbors Act	
CWA 404	Required, Obtained
Other	

PERMISSION TO ACCESS PROPERTY

Permission to access city, county or other local agency land.
Agency Name:

Permission to access state land.
Agency Name:

Permission to access federal land.
Agency Name:

Permission to access private land.
Landowner Name:

6. **Comments.**

Land Use Checklist

Demonstration Project for the Protection and Enhancement of Essential Fish and Wildlife Habitat at Rhode Island, Contra Costa County, Ca.

1. **Does the project involve land acquisition, either in fee or through a conservation easement?**

   No

2. **Will the applicant require access across public or private property that the applicant does not own to accomplish the activities in the proposal?**

   No

3. **Do the actions in the proposal involve physical changes in the land use?**

   No

   If you answered no to #3, explain what type of actions are involved in the proposal (i.e., research only, planning only).

   Rhode Island is owned by the CA Department of Fish and Game and currently is used for providing Fish and Wildife habitat as well as some limited recreation use. This project will not change designation of land use because the project is designed to ultimately protect and enhance habitats for special status species.

4. **Comments.**

Conflict of Interest Checklist

Demonstration Project for the Protection and Enhancement of Essential Fish and Wildlife Habitat at Rhode Island, Contra Costa County, Ca.

Please list below the full names and organizations of all individuals in the following categories:

- Applicants listed in the proposal who wrote the proposal, will be performing the tasks listed in the proposal or who will benefit financially if the proposal is funded.
- Subcontractors listed in the proposal who will perform some tasks listed in the proposal and will benefit financially if the proposal is funded.
- Individuals not listed in the proposal who helped with proposal development, for example by reviewing drafts, or by providing critical suggestions or ideas contained within the proposal.

The information provided on this form will be used to select appropriate and unbiased reviewers for your proposal.

Applicant(s):

Eugene Leong, Association of Bay Area Governments (ABAG)

Subcontractor(s):

Are specific subcontractors identified in this proposal? No

Helped with proposal development:

Are there persons who helped with proposal development?

Yes

If yes, please list the name(s) and organization(s):

Richard Nichols Levine Fricke (LFR)

Marcia Brockbank San Francisco Estuary Project

Margit Aramburu Delta Protection Commission

Kent Nelson CA Department of Water Resources

Bob Orcutt CA Department of fish and Game

Comments:

Budget Summary

Demonstration Project for the Protection and Enhancement of Essential Fish and Wildlife Habitat at Rhode Island, Contra Costa County, Ca.

Please provide a detailed budget for each year of requested funds, indicating on the form whether the indirect costs are based on the Federal overhead rate, State overhead rate, or are independent of fund source.

Independent of Fund Source

Year 1												
Task No.	**Task Description**	**Direct Labor Hours**	**Salary *(per year)***	**Benefits *(per year)***	**Travel**	**Supplies & Expendables**	**Services or Consultants**	**Equipment**	**Other Direct Costs**	**Total Direct Costs**	**Indirect Costs**	**Total Cost**
I.	Organizational	547	15,718.00	6,735.00	-0-	-0-	35,000.00	-0-	-0-	57453.0	4,928.00	62381.00
II.	Environmental Assessment and Permitting	-0-	-0-	-0-	-0-	-0-	75,000.00	-0-	-0-	75000.0	-0-	75000.00
III.	Design/Monitoring	-0-	-0-	-0-	-0-	-0-	170,000.00	-0-	-0-	170000.0	-0-	170000.00
		547	15718.00	6735.00	0.00	0.00	280000.00	0.00	0.00	302453.00	4928.00	307381.00

Year 2												
Task No.	**Task Description**	**Direct Labor Hours**	**Salary *(per year)***	**Benefits *(per year)***	**Travel**	**Supplies & Expendables**	**Services or Consultants**	**Equipment**	**Other Direct Costs**	**Total Direct Costs**	**Indirect Costs**	**Total Cost**
I.	Organizational	512	14,342.00	6,124.00	-0-	-0-	35,000.00	-0-	-0-	55466.0	4,153.00	59619.00
II.	Environmental Assessment/Permitting	-0-	-0-	-0-	-0-	-0-	55,000.00	-0-	-0-	55000.0	-0-	55000.00
III.	Design/Monitoring	-0-	-0-	-0-	-0-	-0-	78,000.00	-0-	-0-	78000.0	-0-	78000.00
		512	14342.00	6124.00	0.00	0.00	168000.00	0.00	0.00	188466.00	4153.00	192619.00

Year 3												
Task No.	**Task Description**	**Direct Labor Hours**	**Salary *(per year)***	**Benefits *(per year)***	**Travel**	**Supplies & Expendables**	**Services or Consultants**	**Equipment**	**Other Direct Costs**	**Total Direct Costs**	**Indirect Costs**	**Total Cost**
		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Grand Total=500000.00

Comments.
Indirect costs are calculated the same for either federal or state funds. The rate is 40.14% of personnel costs.

Budget Justification

Demonstration Project for the Protection and Enhancement of Essential Fish and Wildlife Habitat at Rhode Island, Contra Costa County, Ca.

Direct Labor Hours. Provide estimated hours proposed for each individual.

Program Manager 192 hours Contrat Administrator 192 hours Legal Counsel 15 hours Legal Secretary 20 hours Accountant 4 320 hours Accountant 3 320 hours

Salary. Provide estimated rate of compensation proposed for each individual.

Program Manager $9,193.00 Contract Administrator $5,106.00 Legal Counsel $ 972.00 Legal Secretary $ 455.00 Accountant 4 $8,063.00 Accountant 3 $6,271.00

Benefits. Provide the overall benefit rate applicable to each category of employee proposed in the project.

Program Manager $3,917.00 Contract Administrator $2,189.00 Legal Counsel $ 416.00 Legal Secretary $ 195.00 Accountant 4 $3,455.00 Accountant 3 $2,687.00

Travel. Provide purpose and estimate costs for all non-local travel.

$ -0-

Supplies & Expendables. Indicate separately the amounts proposed for office, laboratory, computing, and field supplies.

$ -0-

Services or Consultants. Identify the specific tasks for which these services would be used. Estimate amount of time required and the hourly or daily rate.

Task I. Organizational 1. Project Coordinator 1100-1150 hours $60-70/ hr Total $70,000.00 Coordinator will oversee environmental documentation and project design; day-to-day progress of contractors; provide progress reports; mediate issues between contractors and work group; asist with writing proposals for funding construction; make necesary presentations on project;and assist with required quarterly programmatic reports. Task II. Environmental Assessment/Permitting Required Expertise by Consultants: Engineering; biology; ecology; hydrodynamics; hydrology; geomorphology; vegetation;CEQA/NEPA and regulatory processes; construction of wetland restoration and erosion control projects, using biotechnical methods;and necessary administrative support skills. 1. Design Engineers 1200-1500 hours $30-150/hr Total $130,000 - Consultants will provide topographic surveys and maps; environmental assessments and analysis on site; prepare reports for fiheries, plants and animals at existing habitat. - Consultants will research permit process/status; research environmental documentation; complete regulatory requirements and application fees and approvals as needed; environmental documentation under CEQA/NEPA, FONSI/NEGDEC, 404, etc.; and technical and administrative (subcontractor) support as needed. Task III. Design/Monitoring 1. Design Engineers 1800-2200 hours $30-150/hr Total $248,000.00 - Consultants will seek additionally needed data including, research of similar local and non-local projects; provide reports on hydrology, hydrodynamics, geomorphology and state frequency analysis and technical and administrative support as needed. - Consultants will develop a state of the art biotechnical design for Rhode Island based on consideration of field conditions, technical feasibility, habitat values to be protected and restored,

available biotechnical methods and avoidance of incidental impacts. - Consultants will develop a monitoring plan that evaluates the demonstration project's technological and environmental merits, focusing onhabitat monitoring rather than species monitoring. It will include physical/technological monitoring of the different stabilizing approaches and biological environmental assessment monitoring (vegetation, fauna terrestrial above water and fauna subtidal, special status species), and will meet CALFED's monitoring requirement.

Equipment. Identify non-expendable personal property having a useful life of more than one (1) year and an acquisition cost of more than $5,000 per unit. If fabrication of equipment is proposed, list parts and materials required for each, and show costs separately from the other items.

$ -0-

Project Management. Describe the specific costs associated with insuring accomplishment of a specific project, such as inspection of work in progress, validation of costs, report preparation, giving presentatons, reponse to project specific questions and necessary costs directly associated with specific project oversight.

1. Program Manager - Total Cost: $13,110.00 - assists with insuring that overall project goals are met, products and tasks completed; assists with writing and submitting required reports;assists with work group organization (developing agenda, etc.; responds to questions about project; provides general project oversight. 2. Contract Administrator - Total Cost: $7,295.00 - assists with contract management (monitors schedule of deliverables, and quality of submitted products and invoicing procedures); assists with developing and overseeing Request for Qualifications and competitive bid process; and assists with writing required reports. 3. Legal Counsel - Total Cost: $1,956.00 - provides legal review/approval of contracts and competitive bid process. 4. Legal Secretary - Total Cost: $921.00 - provides administrative assistanace with legal review of contracts and cometitive bid process. 5. Accountant 4 - Total Cost: $16,153.00 - assists with processing/monitoring invoices and staff time allocation; processes check requisitions; assists with developing monthly accounting statements. 6. Accountant 3 - Total Cost: $12,565.00 - assists with monitoring and submitting invoices; tracks contract accounting requirements; assists with developing monthly accounting statements and required quarterly financial reports.

Other Direct Costs. Provide any other direct costs not already covered.

$ -0-

Indirect Costs. Explain what is encompassed in the overhead rate (indirect costs). Overhead should include costs associated with general office requirements such as rent, phones, furniture, general office staff, etc., generally distributed by a predetermined percentage (or surcharge) of specific costs.

Overhead cost/rate is the same for either state or federal sources. The ABAG rate is 40.14% of total personnel costs, this includes system support for those employees located at the ABAG office. Other employees are located off site and their overhead costs are provided in-kind by the Regional Water Quality Control Board, San Francisco Bay Region.

Executive Summary

Demonstration Project for the Protection and Enhancement of Essential Fish and Wildlife Habitat at Rhode Island, Contra Costa County, Ca.

Demonstration Project for the Protection and Enhancement of Essential Fish and Wildlife Habitat at Rhode Island, Contra Costa County, Ca. (Sacramento-San Joaquin Delta) Executive Summary Project Description Rhode Island is a permanently flooded island located in Contra Costa County, within Ecological Unit 1.4 of the western-central Sacramento - San Joaquin Delta of California, and is located within the Bouldin Island and Woodward Island 7.5 minute, 1:24,000 scale, USGS Quadrangle Map. The goal of the proposed demonstration project is to restore and protect Rhode Island and its associated habitats by undertaking the design and construction of a restoration project demonstrating and evaluating appropriate bio-technical techniques for habitat restoration, and determining erosion forces influencing loss of habitat. This project will incorporate information gained from monitoring efforts expended from the Estuary Project's continuing CALFED Ecosystem Restoration Program funded - Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands. A report will be produced depicting knowledge gained from this study in order to provide guidance to land managers within the Sacramento/San Joaquin Delta (the delta) to successfully restore and protect habitats for In-Channel Islands utilized by sensitive species, and provide suitable habitat for supporting sensitive species. Furthermore, this study is designed to monitor the project in detail in order to gather information including vegetation, species richness, establishment of members of scrub-shrub habitat or palustrine forest habitat, terrestrial fauna, sub-tidal fauna, special status species use, longevity of project's structure, erosion reduction, and soil stability. This project was formulated by the San Francisco Estuary Project's Delta In-Channel Islands work group. The primary objectives of this proposed project are to protect and restore shallow water habitats by performing phase I, which includes a site specific erosion forces study and a literature search of appropriate bio-engineering technologies best suited for the conditions at Rhode Island; preparing an appropriate project design, and performing the project's environmental permitting, agency coordination, and environmental review process. Phase II will include project construction, maintenance, evaluation, and monitoring. Adaptive management will be utilized appropriately during the course of this study, in order to best achieve successful objectives. This project includes a long term monitoring program resulting in data gathered to determine habitat use by sensitive species as well as benefits to those sensitive species. This project is ultimately aimed at aiding in the recovery of special status flora and fauna. This project will attempt to facilitate actions closely resulting in pre-disturbance delta habitats. Hypothesis Hypothesis 1: Appropriately placed bio-engineering materials will arrest erosion along the interior and exterior shoreline of a shallow flooded in-channel island. Hypothesis 2: Protection and retention of the perimeter in-channel island berm will result in the accretion of sediment in the interior of the island, enhancing shallow water habitat. Hypothesis 3: Aquatic and terrestrial species of interest to CALFED will benefit from the protection and enhancement of this unique in-channel island. Primary Benefits This project will protect and enhance shallow water habitat, and create shaded riverine aquatic habitat. This project will benefit delta smelt, sacramento splittail, suisun marsh aster, mason's lilaeopsis, and western pond turtle.

Proposal

Association of Bay Area Governments (ABAG)

Demonstration Project for the Protection and Enhancement of Essential Fish and Wildlife Habitat at Rhode Island, Contra Costa County, Ca.

Eugene Leong, Association of Bay Area Governments (ABAG)

Project: Demonstration Project for the Protection and Enhancement of Essential Fish and Wildlife Habitat at Rhode Island, Contra Costa County, Ca. (Sacramento-San Joaquin Delta)

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
E-mail: eugenel@abag.ca.gov

Type of Organization: ABAG is a Joint Powers State Agency – Council of Governments

Tax ID #: 94-2832478

Technical Contact: California Department of Fish and Game
Todd Gardner
1701 Nimbus Rd. Suite A
Rancho Cordova, Ca. 95670
Phone: (916) 358-2887 Fax: (916) 358-2912
E-mail: tgardner@dfg.ca.gov

Participants and Collaborators: San Francisco Estuary Project's Delta In-Channel Islands Work Group: U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency - Region 9, CALFED Bay-Delta Program, California Department of Fish and Game, California Department of Water Resources, California Department of Boating and Waterways, State Lands Commission, Delta Protection Commission, engineering firms, recreational boaters, and landowners.

Project Type(s): Restoration
Planning: Pilot/Demo

A. Project Description: Project Goals and Scope of Work

1. Problem

Rhode Island is experiencing loss of shallow water, shaded riverine aquatic, emergent marsh, tidal perennial aquatic, palustrine forest, and scrub shrub habitats due to continued erosion of both the interior and exterior components of a remnant levee comprised of peat soils for a permanently flooded in-channel island. This project is designed to demonstrate bio-technical techniques for habitat restoration, and determine erosion forces influencing loss of habitat, to restore and protect Rhode Island from continued erosion of both the interior and exterior components of the island. Rhode Island is a 67 acre permanently flooded island located in Contra Costa County, within Ecological Unit 1.4 of the western-central Sacramento - San Joaquin Delta of California, and is located within the Bouldin Island and Woodward Island 7.5 minute, 1:24,000 scale, USGS Quadrangle Maps. Rhode Island is presently, and has been owned by the California Department of Fish and Game since 1985. See the *Figure 1. Regional Location Map* and *Figure 2. Rhode Island Location Map* at the end of this document.

Project Description / Goals and Objectives

The goal of the proposed demonstration project is to restore and protect Rhode Island and its associated habitats by undertaking the design and construction of a restoration project demonstrating and evaluating bio-technical techniques for habitat restoration, and determining erosion forces influencing loss of habitat. Furthermore, this study is designed to monitor the project in detail in order to gather information including vegetation, species richness, establishment of members of scrub-shrub habitat or palustrine forest habitat, terrestrial fauna, sub-tidal fauna, special status species use, longevity of the project's structure, erosion reduction, and soil stability. A report will be produced depicting knowledge gained from this study and will be provided as guidance to land managers within the Sacramento/San Joaquin Delta (the delta) to successfully restore and protect habitats for In-Channel Islands utilized by sensitive species, and provide suitable habitat for supporting sensitive species. . This project was formulated by the San Francisco Estuary Project's Delta In-Channel Islands work group.

The primary biological objectives of this proposed project are to protect and restore shaded riverine aquatic, shallow water, emergent marsh, tidal perennial aquatic, palustrine forest, and scrub-shrub habitats in a phased approach. *Phase I - Feasibility Study for the Rhode Island Floodplain Management and Habitat Restoration Project (Calfed Grant No. C1106)* was completed by the California Department of Fish and Game in 1999. Project recommendations from this study were used in the creation of Phase II and Phase III of this project, as well as the formation of this project's hypothesis. Phase II includes a site specific erosion forces study and a literature search of appropriate bio-engineering technologies best suited for the specific conditions at Rhode Island, preparing an appropriate project design for both exterior and interior island components, performing the project's environmental permitting, agency coordination and environmental review process, and preparation of a monitoring plan. A separate application will be submitted for Phase III which will include project construction, maintenance, evaluation, and monitoring.

This project includes a monitoring program to gather data to determine and evaluate the project's effectiveness, and habitat use by sensitive species, as well as benefits to those species. This project is also ultimately aimed at aiding in the recovery of special status flora and fauna. It will facilitate actions to restore delta habitats to pre-disturbance conditions. The proposed project is designed to build upon the findings of Estuary Project's continuing CALFED Ecosystem Restoration Program funded - *Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands*.

In an adaptive management approach based upon monitoring results, those bio-engineering techniques that have been demonstrated to be the most effective in protecting in-channel islands with the least cost will be evaluated for use on Rhode Island. In addition, new techniques will be sought out for comparative evaluation. The Rhode Island demonstration project differs in the respect that it will demonstrate and evaluate techniques to restore and protect both the exterior and interior components of permanently flooded islands which host shallow water habitat as well as sensitive fish species inside the protective berm of the old levees, while previous work focused on the exterior of islands.

2. Justification

Conceptual Model

The limiting factors for sensitive species in the Delta include shallow water, shaded riverine aquatic, emergent marsh, tidal perennial aquatic, palustrine forest, and scrub shrub habitats. The stressors facing Rhode Island include erosion from wind and wave action for the exterior and interior of the island, loss of shallow water habitat due to exterior channel form changes, accelerated erosion from human activities such as commercial and recreational boating, and invasion by non-native species. The affected species include Delta smelt, longfin smelt, Sacramento splittail, chinook salmon (winter and spring run), Bay-Delta aquatic food web organisms, western pond turtle, shorebirds and wading birds, and neo-tropical migratory birds.

Restoring and protecting shallow water and shaded riverine aquatic habitats, as limiting factors, will aid in the population increase of shorebirds and wading birds, neo-tropical migratory birds, and Bay-Delta aquatic food web organisms. This action will also aid in the recovery of winter and spring run chinook salmon, Delta smelt, longfin smelt, and Sacramento splittail.

Hypothesis

Hypothesis 1: Appropriately placed bio-engineering materials will arrest erosion along the interior and exterior shoreline of a shallow flooded in-channel island.

Hypothesis 2: Protection and retention of the perimeter in-channel island berm will result in the accretion of sediment in the interior of the island, enhancing shallow water habitat.

Hypothesis 3: Aquatic and terrestrial species of interest to CALFED will benefit from the protection and enhancement of this unique in-channel island.

Test of Hypothesis

This project will test the hypothesis by monitoring, in detail, both physical and biological components to evaluate the effectiveness of methods used, ease of implementation, suitability, and benefits to species and their habitats. Biological monitoring will include vegetation quantity and quality; species richness; establishment of emergent wetland, scrub-shrub habitat or palustrine forest habitat; terrestrial and sub-tidal fauna, and special status species use. Physical monitoring of the different stabilizing approaches includes longevity of the project's structure; erosion reduction; subsidence; and sediment stabilization and/or accretion. Results of this test will be presented in a monitoring report to be provided to the public. See detailed description of monitoring program in the *Monitoring and Data Evaluation* section below.

Background and Biological/Technical Justification

Rhode Island was historically under private ownership and farmed until 1971, when the western levee breached, flooding the interior of the island. Subsequently, no attempts were made to reclaim this island for agricultural production, and the island's ownership transferred to a private waterfowl hunting club. In 1981 the Department of Fish and Game purchased fifty five acres, and in 1985 purchased the remaining 12 acres. Rhode Island currently consists of four key habitat types including 0.47 acres of riparian forest, 3.40 acres of scrub-shrub, 5.25 acres of freshwater marsh, and 530 linear feet of shaded riverine aquatic habitat. The island is presently experiencing erosion of the remnant levee on both the interior and the exterior portions of the island. Although historically farmed, the island serves as an in-channel island with remnant levees comprised of peat soils *(Gardner and Meffe, 1999)*. The Delta In-Channel Islands Workgroup recognized this unique opportunity to demonstrate and evaluate techniques to restore and protect both the exterior and interior components of the island which hosts shallow water habitat inside the protective berm of the old levees.

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 *(Grimaldo et al, 1998)*. Rhode Island provides habitat for many special status species and is an important fish and wildlife habitat resource as well as providing other valuable functions such as recreational and aesthetic benefits *(Gardner and Meffe, 1999)*. After a series of habitat restoration projects were completed on in-channel islands around Staten island (1994, 1995), regulatory agencies raised concerns about the possible over use of rip-rap in habitat protection and restoration projects. The San Francisco Estuary Project's Delta Geographic Subcommittee facilitated a workshop in February 1996 to document the resource problem, institutional and physical impediments to and possible solutions for the preservation and enhancement of Delta in-channel islands. The attendees reached consensus on the need for restoring and protecting in-channel islands, agreed upon by objectives, and established a workgroup to carry them out. Over the past few years, the workgroup has met regularly on in-channel island issues, and reached

agreement on the scope for this demonstration project. The workgroup has helped develop pilot projects funded by CALFED in 1999 and 2000.

Several of CALFED's priority species including salmon, Delta smelt, longfin smelt, Sacramento splittail, migratory songbirds and shorebirds, and waterfowl will benefit from the preservation and enhancement of in-channel island and shallow water habitats. According to CALFED's *Ecosystem Restoration Program Plan, Volume I*, "Many of the Delta channels and their mid-channel islands and shoals are changing rapidly because of increased wakes from boats and changes in water velocities." Our 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 (200-800) acres total." (page 23, Executive Summary).

This project will incorporate information gained from monitoring efforts expended from the Estuary Project's continuing CALFED Ecosystem Restoration Program funded - *Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands.* The adaptive management process for the present project has begun. The work-group identified a problem, established ecosystem goals and objectives, and specified conceptual models. The workgroup proposes to initiate restoration actions; undertake a demonstration project; gather information and learn from the process; assess, evaluate, and adapt as the project evolves; and will continue with the restoration project while continuing to reassess the problems identified in this proposal, as described in *CALFED's Ecosystem Restoration Program – draft Stage 1 implementation Plan*.

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 flora and fauna. The waters of the Legal Delta, for which Rhode Island resides, are considered critical habitat for delta smelt. The benefits of the project will be the protection and enhancement of tidal habitats from erosion, and the promotion of sediment accretion and establishment of shallow water, shaded riverine aquatic, emergent marsh, tidal perennial aquatic, palustrine forest, and scrub-shrub habitats. The project will have no adverse impacts to water conveyance, flood control, and land uses including agriculture and recreation. The project will result in demonstrated methods to stabilize and enhance Delta habitats, especially shallow water habitat within the interior and exterior of permanently flooded Delta islands.

Programmatic Benefits – This project carries out both CALFED's goals, objectives and actions, and the Estuary project's Comprehensive Conservation and Management Plan (CCMP) goals. Our efforts implement several actions in the CCMP's Aquatic Resources – Wildlife and Wetlands program areas. This proposal includes coordination and effective collaboration among the participating agencies and interest groups. In addition, CALFED and the Estuary Project support permit streamlining to clarify and simplify the

process of constructing environmental protection and enhancement projects. This project will help meet the streamlining goals for projects on Delta in-channel islands by including the regulatory agencies participation in the development of the project design and implementation.

Compatibility with other non-ecosystem CALFED objectives (water quality, water supply reliability, and Delta levee system integrity) – Best management practices for preventing erosion and resulting sediment problems will be used. One foundation for the project is to retain on-site sediment to maximize shallow water habitat which will minimize sediment load in the water column, and increase sediment deposition on-site. The proven effectiveness of bio-engineering techniques in preventing erosion will result in a net decrease in the amount of sediment lost. The project will also support CALFED's goal of providing long-term levee stability by protecting in-channels islands, which can provide barriers to protect levees on large islands from erosive forces. It will enhance populations of special status species, and will support water supply reliability by preserving the island.

3. Approach

The approach for this project is the demonstration of several types of bio-engineering materials to evaluate construction methods for shoreline protection and erosion prevention for both the exterior and interior of a permanently flooded island. It will inform project participants and delta land managers about the benefits and restrictions of several types of bio-engineering materials used under erosion conditions revealed at Rhode Island. This project will also produce a study report designed to inform project participants and delta land managers about the benefits and restrictions of several types of bio-engineering materials. This study will techniques to restore and protect the interior of permanently flooded islands which host shallow water habitat as well as sensitive fish species. This project will build upon efforts expended from the Estuary Project's continuing CALFED Ecosystem Restoration Program funded - *Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands*, which only investigated the exterior of in-channel islands.

Phase II (Funds Requested for the 2002 CALFED PSP)

Phase II of this project proposes to perform the following:

- Literature Review of bio-engineering technology and materials for use to protect and enhance shallow water habitat best suited for Rhode Island's conditions. This is an expanding area of interest, which may result in decisions to test newly developed materials.
- Study of erosional forces influencing loss of habitat.
- Design next phase of project based on results of literature review and erosional forces study.
- Project permitting, agency coordination, environmental review and public disclosure process, and develop monitoring plan.

- Review of the performance of bio-technical features of the *Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands*. Will integrate lessons learned from that project.
- Develop Mitigation Plan

Phase III (Funds to be Requested in a future CALFED PSP)

Phase III of this project proposes to perform the following:

- Construction
- Maintenance
- Monitoring
- Apply Adaptive Management Identified in Proposal
- Produce Monitoring and Study Reports

Design

Phase I - The Feasibility Study for the Rhode Island Floodplain Management and Habitat Restoration Project (Calfed Grant No. C1106) was conducted in preparation for a demonstration project to gather information regarding to evaluate key baseline habitat conditions, island structural integrity, and fish and wildlife use associated with Rhode Island. Results from this study indicate a loss of upland habitats over time due to erosion, the presence of sensitive plant species including Mason's Lilaeopsis, Suisun Marsh Aster, and Mudwort, and a large variety of fish and wildlife use of both upland and aquatic components, including sensitive species. A bathymetric survey was conducted to depict elevations of the interior of the island, as well as a habitat inventory measuring quantity and quality of habitats, to serve as baseline information to measure future sediment accretion or depletion and loss of habitat over time.

Phase II of this project proposes to determine the best bio-technical methodologies to be incorporated in the project design, for both the interior and the exterior of the island, based on adaptive management of other previously constructed in-channel island projects. Such information includes tidal velocity, substrate characteristics, water quality parameters, sources and quality of materials, and boat wave conditions.

Bio-technical methodology will vary according to results from monitoring of the CALFED Ecosystem Restoration Program funded - *Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands* as well as performing a literature search and an erosion forces study to achieve restoration goals. In order to develop a project design, detailed data will need to be collected and analyzed and may include: a subsequent bathymetric analysis, subsequent habitat mapping, tidal velocity, substrate characteristics, wave conditions, water quality, sources and quality of materials, and other data collection as required. The design will incorporate both upland and in water work, and will require environmental review.

Construction

There will be no construction in Phase II.

Monitoring

A monitoring plan will be developed in Phase II of this project. Phase III will include physical and biological monitoring to evaluate the effectiveness of methods used, ease of implementation, suitability, and benefits to species and habitats. Results of this monitoring effort will be presented in a monitoring report. See detailed description of monitoring program in the *Monitoring and Data Evaluation* section below.

Study Report

This project will also result in a study report designed to inform project participants and delta land managers about the benefits and restrictions of several types of bio-engineering materials used in both interior and exterior application of flooded in-channel islands, specifically pertaining to erosion conditions revealed at Rhode Island.

4. Feasibility

The California Department of Fish and Game, owner of Rhode Island and participant in the workgroup, supports actions to protect and enhance Rhode Island habitats. In 1999, the California Department of Fish and Game conducted Phase I - Feasibility Study for the Rhode Island Floodplain Management and Habitat Restoration Project (Calfed Grant No. C1106) to evaluate key baseline habitat conditions, island structural integrity, and fish and wildlife use associated with Rhode Island. Results from the Phase I report indicated that the interior of the island offers critical shallow water habitat for several sensitive fish species. The California Department of Water Resources performed studies in surrounding areas surrounding Rhode Island and indicated the high likelihood for the presence of fall run and spring run chinook salmon, larvae and adult delta smelt, and larvae and adult splittail (*Grimaldo et al. 1998)*. The feasibility of bio-engineering for protecting shorelines of Delta in-channel islands and sloughs has been demonstrated through the results of projects such as those on Georgiana Slough conducted by HART and on Webb Tract Island #3, a component of the CALFED Ecosystem Restoration Program funded - *Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands.*

Proposed Scope of Work

The scope of work for Phase II is the following: perform a literature review of appropriate bio-engineering technology to protect and enhance shallow water and shaded riverine aquatic habitats best suited for Rhode Island's conditions; perform a study to determine erosion forces influencing loss of habitat at Rhode Island; prepare a design for the project based upon results of a literature review and an erosional forces study; perform the project permitting, agency coordination, and environmental review and public disclosure process; prepare a monitoring plan for testing the effectiveness of methods used, ease of implementation, suitability, and benefits to species and habitats; and evaluate the performance of bio-technical features of the *Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands*. This project will integrate lessons learned from that project. Tasks are described in detail in section *8. Work Schedule*.

Environmental Review/Permits

The project requires environmental review under CEQA/NEPA and permits/consultation with: U.S. Army Corps of Engineers; U.S Fish and Wildlife Service; National Marine Fisheries Service; California Department of Fish and Game; Central Valley Regional Water Quality Control Board; State Lands Commission; and local governments. Most of these agencies are members of the workgroup and have attended its meetings since its inception. Phase II will provide environmental documentation and permits. By working with state and federal agencies as members of the workgroup in the site selection of this project, the workgroup anticipates the use of a 404 Letter of Permission. Regulatory agencies participating in the workgroup since its inception are the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, the California Department of Fish and Game, and the State Lands Commission.

All of the above agencies are represented in the workgroup as well as representatives from: Pacific Inter-Club Yachting Association; Kjeldsen Sinnock & Neudeck Inc.; LFR Levine-Fricke; MBK Engineering; DCC Engineering; Natural Heritage Institute; U.S. Environmental Protection Agency, Region 9; Delta Protection Commission; Regional Water quality control Board; Department of Water Resources; San Francisco Estuary Project; reclamation districts; and landowners. It is anticipated that the following environmental documentation and permits will be required for this project:

Environmental Document – Initial Study/Environmental Assessment

Environmental Permits – State:

- CDFG: Scientific Collecting Permit
- CDFG: 2081 – Incidental Take permit
- CDFG: 1601 - Streambed Alteration Agreement
- CWA 401 Certification
- Reclamation Board Approval
- State Lands Commission Lease or Waiver

Environmental Permits – Federal:

- ESA Compliance Section 7 Consultation
- ESA Compliance Section 10 Permit
- US Army Corps: CWA 404

5. Performance Measures

Monitoring and Data Evaluation

Monitoring will be instrumental in evaluating the project's technological and biological values. The expected outcome will be the development of criteria and techniques to achieve effective in-channel island protection and restoration within the Delta. The project includes adaptive management for the maximum use of resources. The monitoring plan will emphasize habitats rather than species, and will be further refined through the

permitting and consultation process as comments are suggested by the cooperating agencies, and may include the following:

Biological Monitoring for:
- Vegetation quantity and quality
- Species Richness
- Establishment of emergent wetland, scrub-shrub habitat or palustrine forest habitat
- Terrestrial fauna
- Sub-tidal fauna
- Special status species use

Physical monitoring of the different stabilizing approaches including:
- Longevity of project's structure
- Erosion reduction
- Subsidence
- Sediment stabilization and/or accretion, and accretion monitoring

Monitoring will take place for a minimum of one-year, however up to five years may be required by permitting agencies. Monitoring may include permanent photo stations and physical and biological parameters, and will be utilized in analyzing the effects of techniques used at the project site for stabilizing and enhancing the islands interior and exterior habitats. Biological monitoring may include wildlife use, fisheries resources, vegetation establishment, and invasion of non-native species. Physical monitoring may include determining presence of subsidence, and substrate accretion and erosion reduction. The workgroup will evaluate the results of the monitoring efforts, as well as project costs and ease of installation to be included in the study report.

6. Data Handling and Storage

Monitoring Report

The monitoring plan will evaluate both biological and technical components. The workgroup will review and evaluate monitoring information such as ease of installation, costs, and permitting requirements. The monitoring report will evaluate the techniques to protect, restore, and monitor shallow water, shaded riverine aquatic, emergent marsh, tidal perennial aquatic, palustrine forest, and scrub-shrub habitats, in order to benefit and aid in the recovery of special status plants and animals occurring in the south central Delta. All monitoring data will be made available to the Interagency Ecological Program's monitoring efforts through participating members of the workgroup's project development subcommittee. The subcommittee will provide general technical expertise, review data, and provide oversight of the project. A list of subcommittee members is included in *Section C – Applicant Qualifications*.

Study Report

This project will result in a study report designed to inform project participants and delta land managers about the benefits and restrictions of several types of bio-engineering

materials used in both interior and exterior application of flooded in-channel islands, specifically pertaining to erosion conditions revealed at Rhode Island. The study report will be reviewed by the Delta In-Channel Islands Workgroup and will be made generally available to Delta interested parties and the CALFED program.

7. Expected Products/Outcomes

The expected products and outcomes of this project include the following:

- Project Design, including Plans and Specifications
- Environmental Permits
- Environmental Document
- Monitoring Plan

8. Work Schedule

The general tasks to be completed include the following: Task I. Organizational, Task II. Environmental Review and Permitting, and Task III. Design.

Task I. Organizational

Subtask A. Hiring Project Coordinator
Upon receiving a signed contract from CALFED or its funding entity, ABAG and the work group will proceed with the necessary paperwork and negotiations to secure a Project Coordinator's services.
Deliverable: Contract with project Coordinator

Subtask B. Competitive Bid Process for Design and Construction Engineers
Working with the Delta In-Channel Islands Workgroup (DCI), Project Coordinator and SFEP/ABAG will write and distribute request for qualifications to seek competitive bids from at least three qualified consulting engineering firms with expertise in designing bio-engineering techniques and constructing these techniques. Write draft and final RFQ and organize volunteers from work group to serve as committee to review proposals, interview candidates, and make recommendations for hiring.
Deliverable: Draft and final RFQ
Deliverable: Draft and final contract.

Subtask C. Administrative/Technical Support for Work Group
Develop and distribute meeting agendas, materials, and summaries. Assist with writing quarterly reports, final reports, and decision memoranda, etc. 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 to CALFED for approval. Budget includes funds for project coordinator to evaluate and visit demonstration sites and participate in meetings.

The work group will proceed with obtaining the required permits by participating in a pre-application meeting with the US Army Corps of Engineers and other agencies.

Working with the DCI, the Project Coordinator will assist as needed with appropriate environmental review, reports, and documents. Technical and administrative support for the work group is needed.
Deliverables: Work group meeting materials/summaries attached to quarterly reports; monthly accounting reports; final report; assist with presentations to CALFED and others as requested; conduct appropriate environmental review, provide documentation, obtain required authorizations and local review, provide effective technical/administrative support.

Task II. Environmental Assessment/Permitting

Subtask A. Environmental Assessment/Documentation
Working with DCI, the selected Subcontractor, will provide products for this task, including topographic surveys and maps. They also will provide environmental assessments and analysis on site. Reports will be prepared for fisheries, vegetation, and wildlife at the existing habitat.
Deliverables: Draft and final topo maps/surveys, draft and final environmental assessments/reports for fisheries, plants and animals, copies of all environmental documents.

Subtask B. Obtain Permits
Working with DCI, the selected Subcontractor, will research permit process/ status, track as needed. Research environmental documentation and complete regulatory requirements, application fees paid for approvals/permits needed for the Central Valley Regional Water Quality Control Board, and any local review. Environmental documentation will be completed under CEQA/NEPA.
Deliverables: Status report, copies of documentation/products provided in permit process. Copies of all environmental permits.

Task III. Design

Subtask A. Obtain Additionally Needed Data
Working with DCI, the selected Subcontractor, will review data developed in Phase I, and research existing information about similar local and non-local projects. They also will provide any additional data that is needed prior to designs being developed for the island. Such data are hydrology, hydrodynamics, geomorphology and state frequency analysis. Technical and administrative support is needed for this Task.
Deliverables: Draft and final reports on similar projects; draft and final elevation/forces report; and effective technical /administrative support for this task.

Subtask B. Biotechnical Design for Rhode Island
The demonstration project will take place on along 7,000 linear feet of shoreline of the 67 acre island, 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.

Working with DCI, the selected Subcontractor, will provide a state of the art project design based on a consideration of field conditions, technical feasibility, habitat values to

be protected and restored, available biotechnical methods, and avoidance of incidental impacts. A bio-engineering design will be developed that considers and includes topography, hydraulic/hydrologic data, soils and geotechnical exploration and analysis, climate, ecology (existing and desired habitats, water quality, and sociological needs), wetland vegetation analysis (including existing nuisance species). A variety of innovative bio-technical 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 other components. Bidding units, quantity and cost estimates will be researched and compiled for construction purposes.

It is theorized that exterior of the in-channel island is currently experiencing erosion primarily due to stream channel dynamics, and wind and boat wakes. Interior erosion is due to wind and tide. Proposed techniques will be designed to arrest erosion, protect existing habitat values, and create new habitat areas.
Deliverables: Draft and final biotechnical designs for the island; draft and final vegetation planting designs, a draft and final bid sheet and engineers estimate for construction.

Subtask C. Monitoring Plan
Working with DCI, the selected Subcontractor, will use several bioengineering techniques for habitat stabilization and each of these may require different or modified monitoring techniques. The design will emphasize habitat monitoring rather than species monitoring, and will be further refined through the permitting and consultation process. The design may include: physical/ technological monitoring of the different stabilizing approaches; and biological environmental assessment monitoring (vegetation, fauna terrestrial or above the water, fauna subtidal, special status species). The monitoring design will meet CALFED's monitoring requirements, including monitoring items, criteria, length of time, and costs.
Deliverables: Draft and final monitoring plans that meet CALFED's monitoring requirements.

Schedule of Completion Dates for General Tasks/Deliverables

Assuming contract is signed by July 1, 2002, the following schedule is proposed.

Task I. Organizational

Subtask A. Hire Project Coordinator

Write draft interagency agreement to hire coordinator	July 2002
Write final interagency agreement to hire coordinator	August 2002

Subtask B. Competitive Bid Process for Design and Construction Engineers

Work group/Project Coordinator write/distribute RFQ	July - Aug 2002
Work group interviews, makes selection	Sept. 2002
Negotiate draft contract	Sept. 2002

Complete final contract	October 2002

Subtask C. Administrative/Technical Support for Work Group

Meeting organization and distribution of materials (at least 6 meetings annually)	July 2002 - June 2004
Preparation of quarterly programmatic/financial reports	10/10/02, 1/10/03, 4/10/03, 7/10/03, 10/10/03, 1/10/04, 4/10/04, 7/10/04
Submit final report	July 2004
Presentations to CALFED and others	July 2002 - June 2004
Submit documents per US ACOE pre-application meeting and local review	July 2002 - June 2004
Provide effective technical and administrative support	July 2002 - June 2004

Task II. Environmental Assessment/Permitting

Subtask A. Obtain Permits - Subcontractor

Prepare status report on permitting process	March 2004
Draft CEQA/NEPA document	Oct.2003
Final CEQA/NEPA document	April2004

Subtask B. Environmental Assessment/Documentation - Subcontractor

Prepare draft topographic maps/survey	Oct. 2003
Prepare final topographic maps/survey	Nov. 2003
Prepare environmental assessments for fisheries, vegetation, animals - draft report	May 2003
Prepare environmental assessments for fisheries, vegetation, animals - final report	June 2003
Complete final report on environmental documentation	July 2004

Task III. Design

Subtask A. Obtain Additionally Needed Data - Subcontractor

Research and prepare draft report on similar projects	March 2003
Prepare final report on similar projects	March 2003
Prepare draft elevation/forces report	March 2003
Prepare final elevation/forces report	April 2003
Provide necessary technical/administrative support	July 2002 - June 2004

Subtask B. Biotechnical Design for Island - Subcontractor

Perform geotechnical exploration on site	Oct. 2002 - March 2003
Prepare draft biotechnical design for island	April 2003
Prepare final biotechnical design for islands	May 2003
Prepare draft vegetation planting design	April 2003
Prepare final vegetation planting design	May 2003
Research and develop draft quantity, cost estimate	May 2003
Prepare final bid sheet and engineers estimate	May 2003

Subtask C. Monitoring Plan - Subcontractor

Prepare draft monitoring plan	May 2003
Prepare final monitoring plan	July 2003

B. Applicability to CALFED ERP and Science Program Goals and Implementation Plan and CVPIA Priorities

1. ERP, Science Program and CVPIA Priorities

Draft Stage 1 Implementation Plan Priorities

Goal 1: This project will aid in the recovery of Delta smelt; splittail; Chinook salmon (winter and spring run); western pond turtle; shorebirds and wading birds; and neotropical migratory birds (at-risk native species) by stabilizing and creating shallow water habitat which these species are dependent on.

Goal 4: This project will restore and protect shallow water; shaded riverine aquatic; emergent marsh; tidal perennial aquatic; palustrine forest; and scrub-shrub habitat types in the Bay-Delta estuary, specifically Rhode Island, by protecting, stabilizing, and creating these habitats.

2. Relationship to other Ecosystem Restoration Projects

This project proposes to gain knowledge of the feasibility of bio-engineering for protecting shorelines of Delta in-channel islands and sloughs. This general concept being investigated by projects such as those on Georgiana Slough conducted by HART and on Webb Tract Island #3, a component of the CALFED Ecosystem Restoration Program funded - *Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands.*

3. Requests for Next-Phase Funding

This proposal is for Phase II of a three-phased project. DFG acquired CALFED funding for *Phase I - Feasibility Study for the Rhode Island Floodplain Management and Habitat Restoration Project (CALFED Grant No. C1106)*, and has performed preliminary data collection for this project.

4. Previous Recipients of CALFED Program or CVPIA Funding

Demonstration Project for the Protection and Enhancement of In-channel Islands (CALFED No. 1997 K185) (Phase I)
This phase has been completed and results were submitted to CALFED.

Demonstration Project for the Protection and Enhancement of In-channel Islands (CALFED No. 2001 E-200) (Phase II)
This project is currently in Phase II – Construction and Monitoring. Project performance reports are presently being submitted to CALFED on a regular basis.

Phase I - Feasibility Study for the Rhode Island Floodplain Management and Habitat Restoration Project (CALFED Grant No. C1106).
This project was completed in 1999, and a copy of the resulting feasibility study report was provided to CALFED at that time.

5. System-Wide Ecosystem Benefits

This project complements projects such as those on Georgiana Slough conducted by HART and on Webb Tract Island #3, a component of the CALFED Ecosystem Restoration Program funded - *Demonstration Project for the Protection and Enhancement of Delta In-Channel Islands,* by protecting and providing habitat for sensitive aquatic species such as several of CALFED's priority species including salmon, Delta smelt, longfin smelt, Sacramento splittail. The above projects are consistent with *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 (200-800) acres total." (page 23, Executive Summary). These projects establish, enhance, and protect shallow water habitat. Shallow water habitat is critical spawning and juvenile nursery habitat for Delta smelt. These projects also create refugia for upstream and downstream migrations of anadromous species.

6. Additional information for Proposals Containing Land Acquisition

This project does not involve land acquisition.

C. 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 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 is designated as the lead agency for implementing the CCMP; and ABAG acts as SFEP's fiscal agent. SFEP's committee's 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. Most recently, the SFEP has secured CALFED Ecosystem Restoration Program funded funding to implement the "Demonstration Project for the Protection and Enhancement of Delta In-channel Islands".

Project Organization – Work Group:

The Estuary Project has taken the lead responsibility for organizational and administrative tasks for the workgroup since its inception, and the Estuary Project will continue in this role for the demonstration project. 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. CALFED staff attend and participate in work group meetings.

The workgroup has determined that several consultants will be hired through ABAG's competitive bid process as follows:

1) an on-ground "day-to-day" coordinator with technical expertise and experience in restoration/construction projects;
2) consultants for development of design/engineering plans for sites;
3) consultants for construction of restoration projects;
4) consultants for environmental compliance/permitting;

5) consultants for writing, editing and producing guidelines/report;
6) consultants for additionally needed data.

Workgroup members (see below for list of members) will provide technical and scientific review/expertise and will serve as the hands-on oversight body for the demonstration project. The workgroup will continue to provide in-kind services for the technical/scientific review tasks for the demonstration project.

Workgroup members include: Rick Morat and Matt Vandenberg, US Fish and Wildlife Service; Margit Aramburu, Delta Protection Commission; Bob Orcutt, California Department of Fish and Game; Lorna Burks, State Lands Commission; Kent Nelson, California Department of Water Resources; Luisa Valiela, U.S. EPA – Region 9; Bill Curry, California Department of Boating and Waterways; Richard Nichols, EIP Associates; Phil Schaefer, Pacific Inter-Club Yachting Association; Gil Labrie, DCC Engineering; Chris Kjeldsen and Jerry Hadley, Kjeldsen, Sinnock, and Neudeck, Inc.; Gilbert Cosio, MBK Engineering; Earl Cooley, Medford Island; Jerry Thomas, Natural Heritage Institute; and those attending but not on a regular basis: Gary Tilkian, metropolitan Water District; Elaine Archibald, CUWA; Chris Mobley, National Marine Fisheries Service.

Project Organization – SFEP/ABAG:

ABAG will serve as the fiscal agent for the demonstration project. Duties for Project Manager and Contract Manager will be contracted out. Mr. Todd Gardner will serve as Technical Contact for the demonstration project. Mr. Gardner is a California Department of Fish and Game employee in the Delta Flood Protection Program. Mr. Gardner presently holds a bachelor's degree in Environmental Science, and has worked for the Idaho Department of Fish and Game performing various functions in wildlife and habitat management and research; the California Department of Transportation performing various functions in environmental planning, compliance, and review; and the California Department of Fish and Game performing various functions in wildlife and habitat management, as well as environmental compliance and review. Mr. Gardner has written many environmental documents and permits, and has performed a host of biological compliance efforts of a technical nature.

D. Cost

1. Budget

Please see submitted Electronic Forms VI and VII.

2. Cost Sharing

ABAG will serve as 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 $12,500. Staff include Joe Chan, Finance Director; Larry Gayden, Asstn. Finance director; Terry Bursztynsky, Environmental Management Director; Marcia Brockbank, SFEP Program Manager; Paula Trigueros, Contract Administrator; Karen Lewis and Lucy Ng, ABAG Accounting staff.

E. Local Involvement

The Delta In-Channel Work Group was created as a regional group to implement the goals of the San Francisco Estuary Projects's Comprehensive Conservation and management Plan adopted in June 1993. The Work Group includes representatives of local, state and federal agencies, nonprofit groups, landowners and special districts in the Delta. The Work Group selected protection and enhancement of Delta In-Channel Islands as a program. The project has been conceived, debated, and designed as a collaborative project with participation of many groups and individuals reflecting many scientific and policy areas.

The Phase II project will include notification of the adjacent landowners and the general public.

Permission of Property Owners:

Rhode Island is owned by the Department of Fish and Game; permission to go forward with the project is in hand; construction of the project is subject to Department review of the engineering drawings.

Adjacent Property Owners:

Will be notified by mail upon receipt of funding to implement Phase II. List of Adjacent and Nearby Property Owners will be developed from lists of legal property owners, and will include: Reclamation Districts. There are no known adverse third party impacts.

Local Government:

Local governments have been notified of the grant application through a letter to the Planning Director of Contra Costa County; upon receipt of funding, a second notice will be mailed to Planning Director of Contra Costa County.

Coordination with Watershed Groups or Local Conservancies:

Upon receipt of funding, notification will be sent to the Audubon Society Local Chapter and Delta Keeper; no other watershed groups or local conservancies have been identified. There is no known opposition to the proposed project.

Notification and Involvement of the General Public:

The mailing list of the Delta In-Channel Work Group includes approximately 350 persons; they receive notice of each meeting of the Work Group and minutes of each meeting outlining actions of the Work Group. In addition, the Work Group will send press releases to a list of approximately 25 printed, radio and television contacts to disseminate information about the project to the general public throughout the Bay Area. All of the above will be notified if the proposal is funded.

Local Support/Coordination with Other Programs:

The workgroup also coordinates with the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency - Region 9, CALFED Bay-Delta Program, California Department of Fish and Game, California Department of Water Resources, California Department of Boating and Waterways, State Lands Commission, and the Delta Protection Commission.

F. Compliance with Standard Terms and Conditions

ABAG acting as the San Francisco Estuary Project's fiscal agent will comply with the terms and conditions described in Attachments D and E of the CALFED Ecosystem Restoration Program - 2002 Proposal Solicitation Package.

G. Literature Cited

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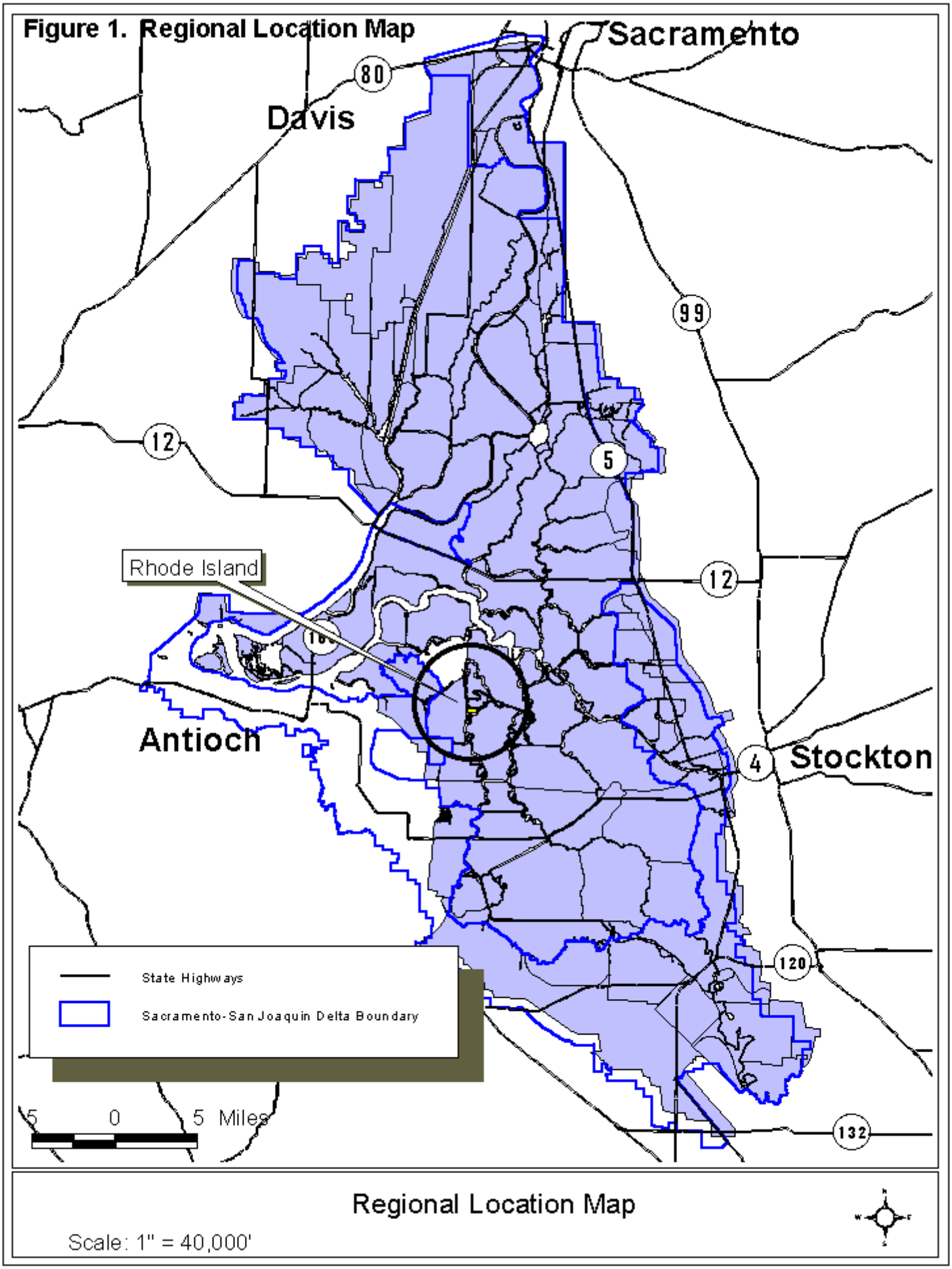
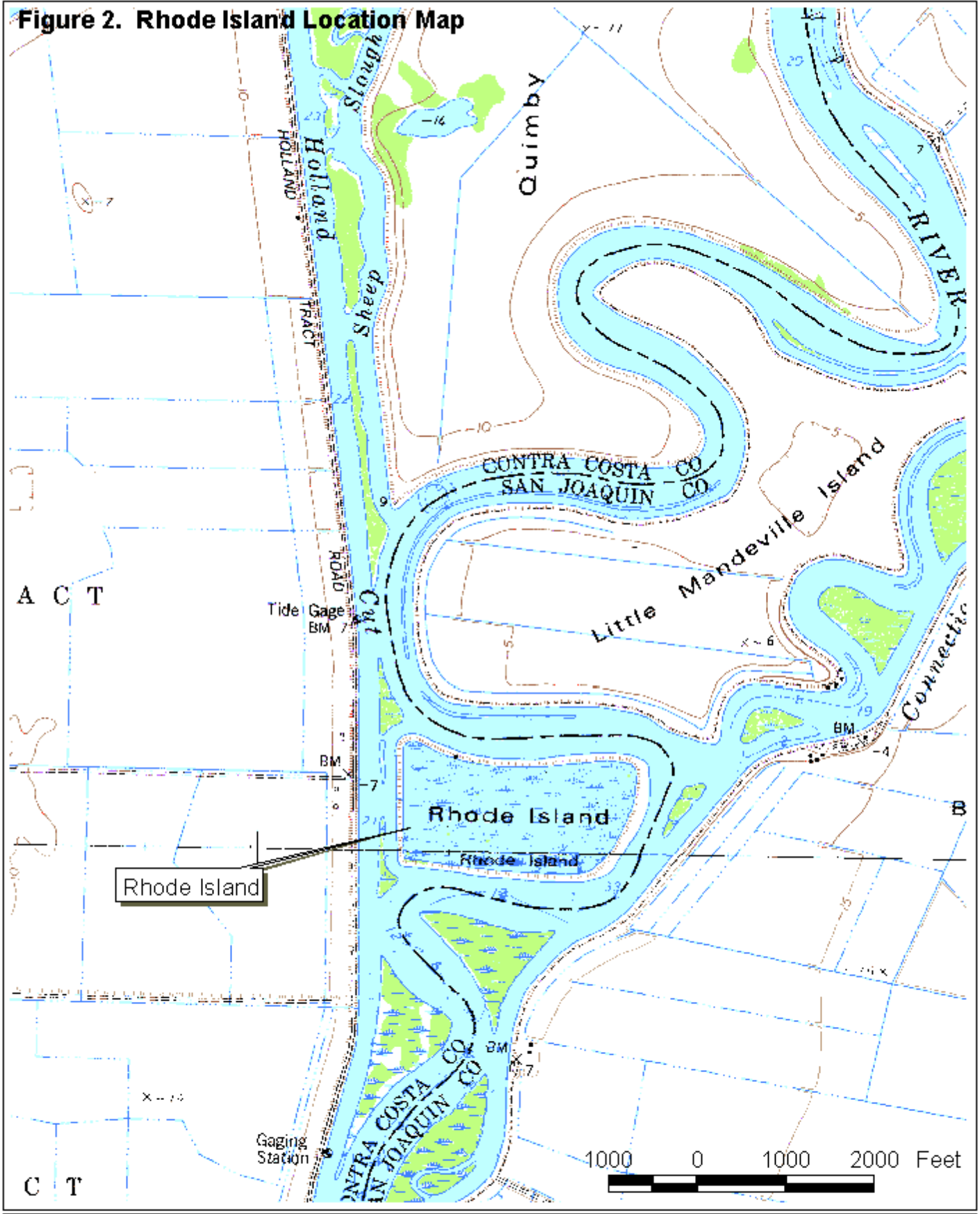


Regional Location Map

Scale: 1" = 40,000'

Figure 2. Rhode Island Location Map



Rhode Island Location Map

Scale: 1" = 1500'