

Proposal Title: Hill Slough West Habitat Restoration Demonstration Project
 Applicant Name: CA Dept. of Fish and Game, Bay-Delta and Special Water Projects Division
 Mailing Address: 4001 N. Wilson Way, Stockton, California 95205
 Telephone: (209) 948-7800
 Fax: (209) 946-6355
 Email: fwernett@delta.dfg.ca.gov

Amount of funding requested: \$ 65,000 for One year

Indicate the Topic for which you are applying (check only one box).

- | | |
|---|---|
| <input type="checkbox"/> Fish Passage/Fish Screens | <input type="checkbox"/> Introduced Species |
| <input checked="" type="checkbox"/> Habitat Restoration | <input type="checkbox"/> Fish Management/Hatchery |
| <input type="checkbox"/> Local Watershed Stewardship | <input type="checkbox"/> Environmental Education |
| <input type="checkbox"/> Water Quality | |

Does the proposal address a specified Focused Action? Yes No

What county or counties is the project located in? Solano County

Indicate the geographic area of your proposal (check only one box):

- | | |
|---|---|
| <input type="checkbox"/> Sacramento River Mainstem | <input type="checkbox"/> East Side Trib: _____ |
| <input type="checkbox"/> Sacramento Trib: _____ | <input checked="" type="checkbox"/> Suisun Marsh and Bay |
| <input type="checkbox"/> San Joaquin River Mainstem | <input type="checkbox"/> North Bay/South Bay: _____ |
| <input type="checkbox"/> San Joaquin Trib: _____ | <input type="checkbox"/> Landscape (entire Bay-Delta watershed) |
| <input type="checkbox"/> Delta: _____ | <input type="checkbox"/> Other: _____ |

Indicate the primary species which the proposal addresses (check all that apply):

- | | |
|--|---|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | <input type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Winter-run chinook salmon | <input type="checkbox"/> Fall-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon | <input type="checkbox"/> Longfin smelt |
| <input checked="" type="checkbox"/> Delta smelt | <input type="checkbox"/> Steelhead trout |
| <input checked="" type="checkbox"/> Splittail | <input type="checkbox"/> Striped bass |
| <input type="checkbox"/> Green sturgeon | <input checked="" type="checkbox"/> All chinook species |
| <input type="checkbox"/> Migratory birds | <input type="checkbox"/> All anadromous salmonids |
| <input checked="" type="checkbox"/> Other: <u>CA clapper rail and</u>
<u>Salt marsh harvest mouse</u> | |

Specify the ERP strategic objective and target(s) that the project addresses.

Include page numbers from January 1999 version of ERP Volume I and II:

Restoration of diked former tidal marsh areas (Vol. 1, page 133); Restoration of tidal brackish marsh (Vol. 1, page 373); provide high quality habitat and transitional zone for shorebird feeding and nesting (Vol. 1, page 355); Restoration of marshland habitat (Vol. 1, page 261); Restoration of tidal habitat (Vol. 1, page 264); Restoration of tidal action to aquatic habitat (Vol. 1, page 309); Restoration of tidal sloughs (Vol. 1, page 359)

Indicate the type of applicant (check only one box):

- | | |
|--|---|
| <input checked="" type="checkbox"/> State agency | <input type="checkbox"/> Federal agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input type="checkbox"/> Non-profit |
| <input type="checkbox"/> Local government/district | <input type="checkbox"/> Private party |
| <input type="checkbox"/> University | <input type="checkbox"/> Other: |

Indicate the type of project (check only one box):

- | | |
|--|---|
| <input checked="" type="checkbox"/> Planning | <input type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Education |
| <input type="checkbox"/> Research | |

By signing below, the applicant declares the following:

1. The truthfulness of all representations in their proposal;
2. The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and
3. The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) 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.

Frank Wernette
Printed name of applicant

Frank Wernette
Signature of applicant

**Hill Slough West
Habitat Restoration, Phase II
Demonstration Project**

Prepared in Response to:

CALFED Bay-Delta Program
Proposal Solicitation Package
February 1999
Ecosystem Restoration Projects and Programs

Applicant:

California Department of Fish and Game
Central Valley Bay-Delta Branch
4001 North Wilson Way
Stockton, California 95205
Phone (209) 948-7800

Principle Investigator:

Frank Wernette, Senior Biologist
California Department of Fish and Game
Central Valley Bay-Delta Branch
4001 North Wilson Way
Stockton, California 95205
Phone (209) 948-7800; Fax (209) 946-6355
e-mail: fwernett@delta.dfg.ca.gov

Type of Organization:

State Agency

Implementation Participants/Collaborators:

Current participants are the California Department of Fish and Game (DFG), the California Department of Water Resources (DWR), Suisun Resource Conservation District (SRCD), and U.S. Bureau of Reclamation. Implementation, guidance, and assistance will be provided by Carl Wilcox - DFG, Sandy Morey - DFG, and Bob Garrison - DFG. Additional individuals such as Ms. Brenda Grewell, U.C. Davis, and Mr. Peter Baye, U.S. Fish and Wildlife Service, will be collaborators.

**Executive Summary
Hill Slough West, Phase II
Habitat Restoration
Demonstration Project**

Applicant:

California Department of Fish and Game
Central Valley Bay-Delta Branch
4001 North Wilson Way
Stockton, California 95205
Phone (209) 948-7800

Project Description: The Hill Slough West Habitat Restoration Demonstration Project is a proposal to restore tidal action to approximately 200 acres of seasonal and permanent wetlands in northeastern Suisun Marsh. The property is located at the Hill Slough Wildlife Area which is owned and managed by the California Department of Fish and Game (DFG). Implementation of the plan will be carried out in four phases over approximately five years.

Primary Benefits: This proposal addresses two of the listed priority habitats: tidal saline emergent wetlands habitat and perennial grasslands. It also addresses primary species: winter-run and spring-run chinook salmon, delta smelt, and splittail; and secondary species: migratory birds such as waterfowl. Benefits of the project include: reduced entrainment of fish into unscreened diversions, reversal of physical isolation of the marsh plain, restored ecological processes and functions associated with tidal wetlands, restored habitat for restoration of rare plant communities, increases in wintering waterfowl use by diving ducks, and reduced subsidence.

Proposed Approach: Our basic approach is to promote a self-sustaining marsh ecosystem through restoration of natural edaphic, topographic, and tidal conditions within an area that has been leveed off from tidal influence. Phase I, currently in progress, includes the formation of a steering group, coordination with the Suisun Marsh Environmental Coordination Advisory Team, and securing detailed hydrologic and topographic surveys. Phase II, contained in this proposal, will be to complete the environmental documentation and permitting as required by CEQA; coordinate with USFWS on NEPA and ESA; obtain permits for construction of the project as required from San Francisco Bay Conservation and Development Commission; and coordinate with Caltrans, State Water Resources Control Board, SRCD, PG&E, and Solano County Mosquito Abatement. Phases III and IV will be project construction and monitoring.

Project Justification: From the mid-1880's to the early 1900s over 90 percent of the tidal wetland in the Suisun Marsh and Bay system has been converted to a non-tidal condition. The loss of the tidal connection has reduced or interfered with ecological processes and functions critical for sustaining a healthy aquatic ecosystem. A lack of emergent wetlands reduces the amount of potential rearing habitat for chinook salmon, delta smelt, and splittail. Reductions

in and fragmentation of this habitat has resulted in reduced populations of California clapper rail, salt marsh harvest mouse, and rare plants dependent on high tidal marsh and adjacent upland transition. The project will help reverse the above conditions.

Budget Costs and Third Party Impacts: Funds for the completion of Phase II are requested in the amount of \$65,000. Phase I should be completed by March 2000 but Phase II can and should begin before that time. Phase II should be completed by September 2000. Future costs will be primarily funded using a portion of approximately \$3 million that is set aside from the Suisun Marsh Mitigation Agreement. The funds provided by CALFED will help leverage the funding provided through the mitigation agreement to enable Suisun Marsh wetland managers to restore a larger mosaic of tidal wetlands in a critical part of the Suisun Marsh. No significant third party impacts were identified for this project.

Applicant Qualifications: The DFG has extensive experience in developing and managing fish and wildlife habitat on numerous wildlife areas throughout the State, including 15,000 acres in the Suisun Marsh. The principle investigator has worked in the Suisun Marsh for 18 years and has experience with wetland development in the Suisun Marsh. Mr. Bob Garrison is the DFG's statewide coordinator of interpretive services; Ms. Sandy Morey is the DFG's endangered plant program coordinator; Mr. Carl Wilcox is a DFG expert in environmental review and regional fish and wildlife and wetlands planning. Ms. Brenda Grewell is a plant/wetland ecologist with 14 years of professional experience in California wetlands, including 10 years in the Suisun Marsh.

Monitoring and Data Evaluation: Monitoring will include, but will not be limited to: water quality in Hill Slough; fisheries occurrence in the restored tidal wetland; wildlife use patterns in all of the restored areas; and vegetation growth, trends, and recruitment throughout the restoration area to monitor plant composition and makeup. As part of the monitoring plan several testable hypotheses will be developed. Those hypotheses will be related to how fish use the restored tidal wetland as well as how special status plants survive and reproduce. Monitoring will be conducted by IEP staff and qualified staff and volunteers associated with the Hill Slough Wildlife Area.

Compatibility and Benefits to CALFED Non-ecosystem Objectives: The proposed project is compatible with the objectives of the other CALFED programs and does not conflict with any of the potential water and storage conveyance alternatives. The project will help address objectives of the Water Quality Program. The proposal dovetails with long-term wetland goals set for the Central Valley and Delta by the Central Valley Habitat Joint Venture program. This project also dovetails with long-term wetlands goals developed for San Francisco Bay wetlands and the tidal wetlands recovery efforts of the USFWS. It is consistent with the visions, implementation objectives, and targets for CALFED's ERPP.

Negative Third Party Impacts: None.

Hill Slough West Habitat Restoration, Phase II

Project Description and Approach

The Hill Slough West Habitat Restoration Demonstration Project is a proposal to restore tidal action to approximately 200 acres of seasonal and permanent wetlands in northeastern Suisun Marsh. The property is located at the Hill Slough Wildlife Area which is owned and managed by the California Department of Fish and Game (DFG). Implementation of the plan will be carried out in four phases over approximately five years. Phase I, currently in progress, has accomplished the formation of a steering committee. Participants in the steering committee are DFG, DWR, Suisun Resource Conservation District, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, and U.C. Davis personnel. Currently a RFP for detailed topographic surveys and hydrologic surveys is being developed. From these, with participation of the committee, a restoration plan will be developed. The plan will restore a transition from perennial aquatic habitat in Hill Slough to low marsh, high marsh, and upland transition.

Location of Project: The Hill Slough West Project is a 200 acre area located west of Grizzly Island Road on Hill Slough Wildlife Area in the northeastern Suisun Marsh approximately two miles east of Suisun City in Solano County (Figure 1). The project area has levees which allows the northern portion to have been grazed and the southern portion managed as a permanent wetland. The site is accessible to the public.

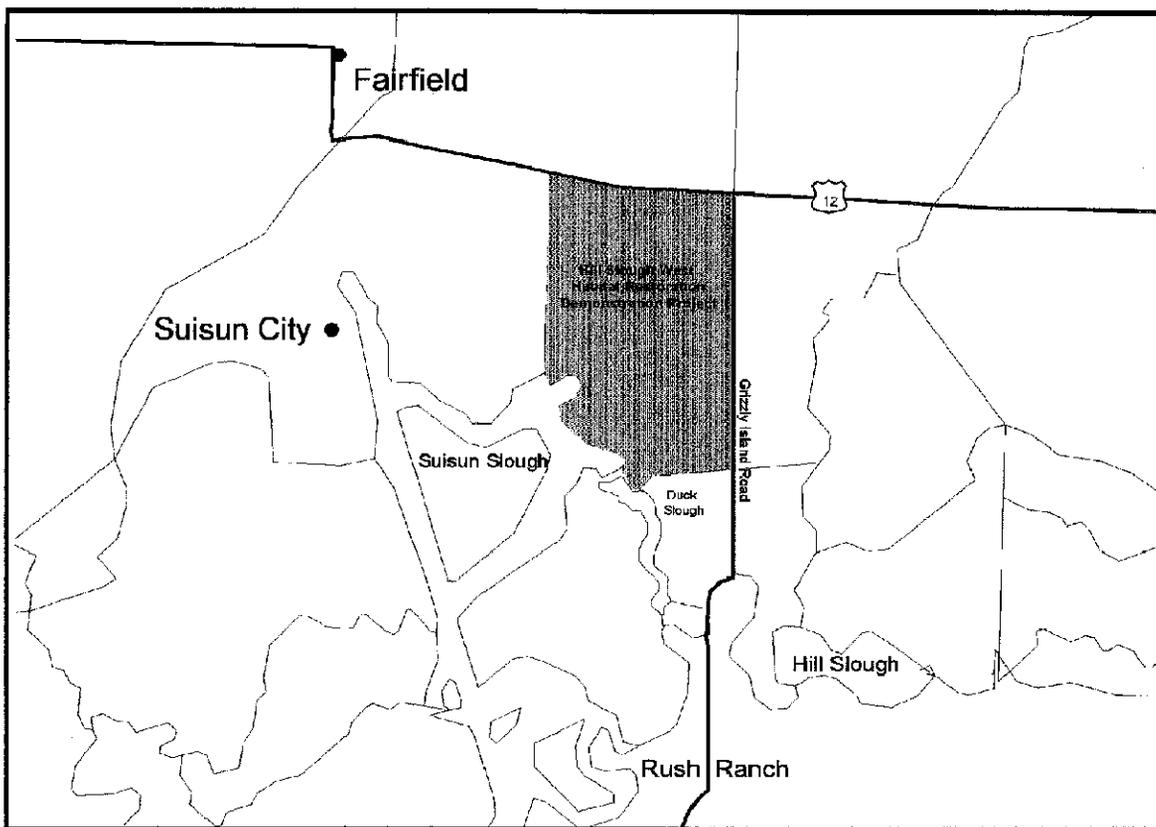
Existing Conditions: Hill Slough West is a leveed permanent and seasonal wetland that contains emergent plants such as hardstem bulrush and cattail and a fringe of salt grass. Unscreened gated culverts provide water to the site. The site supports a variety of wetland associated wildlife such as waterfowl and wading birds. The current value of the site for wildlife is limited. It is used by species such as mallards and American bitterns. Aquatic values of the site are limited, and the unscreened diversion represents a stressor to aquatic resources rather than a benefit.

Proposed Restoration Approach: Our basic approach is to promote a self-sustaining marsh ecosystem through restoration of natural edaphic, topographic, and tidal conditions within an area that has been leveed off from tidal influence. We will rely on natural abiotic and biological successional processes to promote gradual marsh regeneration, rather than employing an aggressive approach that would entail extensive planting and seeding. Primary restoration methods will entail selective or complete levee removal, limited excavation of higher order channels, limited replanting of sensitive plant species, and a program of invasive species management.

Proposed Scope of Work

Project phases: There are four phases for completion of the restoration project. Phase

Hill Slough West Habitat Restoration Demonstration Project



 **Project Area**



 **Major Road**
 **Waterway**
 **City**

I is in progress and is composed of the following tasks.

Task 1 was the formation of an interdisciplinary interagency team. This team will help guide the selection of a consultant, frame management strategies for the restoration of native plant communities, and outline education and interpretive opportunities.

Task 2 is coordination with the Environmental Coordination Advisory Team (ECAT) which is underway and will be ongoing. ECAT has been established to oversee compliance with existing permit and biological opinion requirements for DWR and USBR in the Suisun Marsh.

Tasks 3 through 9 will be to hire a consultant to conduct a detailed topographic survey; hire a hydrologic consultant with expertise in the Suisun and San Francisco Bay area and experience with successful tidal wetlands restoration projects in the Bay; develop a restoration plan; develop a monitoring plan; prepare a habitat mosaic and interpretive program; and start environmental compliance and permitting.

Phase II, this proposal, will be to complete the environmental documentation and permitting as required by CEQA; coordinate with USFWS on NEPA and ESA; obtain permits for construction of the project as required from San Francisco Bay Conservation and Development Commission; U.S. Army Corps of Engineers; and coordinate with Caltrans, State Water Resources Control Board, SRCD, PG&E, and Solano County Mosquito Abatement. An EA/IS will be prepared and a Negative Declaration and Fonsi are expected. This phase can begin immediately.

There are two other phases. Phase III is the restoration plan implementation; and Phase IV will be the reestablishment of rare plant communities, commencement of monitoring, and interpretive program implementation.

Project Justification: From the mid-1880's to the early 1900s over 90 percent of the tidal wetland in the Suisun Marsh and Bay system has been converted to a non-tidal condition. The loss of the tidal connection has reduced or interfered with ecological processes and functions critical for sustaining a healthy aquatic ecosystem. A lack of support for the Bay-Delta aquatic foodweb and foodweb organisms contributes to unhealthy fish populations. A lack of emergent wetlands reduces the amount of potential rearing habitat for chinook salmon, delta smelt, and splittail. Reductions in and fragmentation of this habitat has resulted in reduced populations of California clapper rail, salt marsh harvest mouse, and rare plants dependent on high tidal marsh and adjacent upland transition. The project will help reverse the above conditions and provide CALFED with extremely valuable information to forecast restoration costs.

Ecological/Biological Benefits

Primary benefits: The proposed Hill Slough West project will contribute to meeting the vision for saline and brackish emergent wetland habitat by increasing the area of this habitat to assist in the recovery of special-status fish, plant, and wildlife populations (page 31 of Volume I of the ERPP). The project will also contribute to meeting the implementation objective for the

tidal brackish and freshwater marsh special-status plant species by protecting existing populations and restoring habitat to promote the establishment of additional populations (page 274 of Volume I of the ERPP).

Secondary benefits: A secondary benefit of implementing this restoration plan is that it would begin to solicit the interest of other parties to participate in additional restoration efforts. It offers the first step in developing a larger scale, more contiguous restoration effort that could eventually join Hill Slough, Peytonia Slough, Joice Island, and Rush Ranch. Completion of this project will provide a base line for habitat restoration costs for restoring tidal wetlands in the Suisun Marsh. This will allow CALFED to accurately forecast costs of meeting the restoration targets in Suisun Marsh. In addition, landowners, wetland managers, and local communities will have become involved in the process and have a stronger understanding of CALFED's objectives.

Third party benefits: Additional benefits of the project include an increase in public recreational opportunities for activities such as bird watching, nature study, and education. Due to the existence of an active interpretive program at Hill Slough Wildlife Area and the close proximity to the proposed restoration site, the potential to add an interpretive program related to the restoration of a tidal wetland is very high. Specialists within the DFG will work to craft that interpretive program.

Linkages: The project will help address the general target for the tidal brackish marsh special-status plant species of maintaining genetic diversity, preventing species extinction from localized catastrophic occurrences, and promoting the sustainability of each species. Two plant species that could benefit the most are soft bird's-beak and Suisun thistle. Attachment A shows the contribution Hill Slough Restoration Project makes to visions, programmatic actions, and objectives of the ERPP.

Benefits of the project include addressing the following:

- Reduced entrainment of fish into unscreened diversions.
- Reversal of physical isolation of marsh plain.
- Restored ecological processes and functions associated with tidal wetlands.
- Restored habitat for restoration of rare plant communities.
- Increased wintering waterfowl use by dabbling ducks.
- Reduced subsidence.

Connectedness: This project provides connectedness of tidal wetland habitat in the north central Suisun Marsh by connecting to Hill Slough. By connecting this with existing tidal habitat, the project has more value than if it were isolated. Additionally, this project would reverse the stressor of water management activity. Past water management activities, specifically diking, has resulted in increased depth and duration of flooding in high marsh zone beyond the range of natural variability and seasonality. The northern part of the project site, also due to levees, has seen an elimination of any tidal action.

System-Wide Ecosystem Benefits: The proposal dovetails with long-term wetland goals set for the Central Valley and Delta by the North American Central Valley Habitat Joint Venture program. The project dovetails with long-term wetland goals developed by the San Francisco Bay Wetlands Ecosystem Goals Project which recommends restoration of tidal marsh in the Hill Slough area. The project also dovetails with tidal wetlands recovery efforts of the USFWS and is consistent with the visions, implementation objectives, and targets for CALFED's ERP.

Compatibility with Non-Ecosystem Objectives: The proposed project is compatible with the objectives of the other CALFED programs and does not conflict with any of the potential water supply and storage conveyance alternatives. The proposed project will help address objectives of the Water Quality Program.

Durability: The proposed project will help ensure the long-term viability of the site by restoring tidal action and natural hydrologic and sedimentation processes. Restoring these processes will enable the site to sustain itself even with sea level rise. Once restoration is completed maintenance activities, if needed, will be minor.

Technical Feasibility and Timing

The project applicant will complete environmental compliance and permitting needed to carry out the project. The applicant will work closely with the U.S. Army Corps of Engineers to ensure the application for a 404 permit is complete. The deliverables associated with this task are a draft Environmental Assessment/Initial Study and draft USACOE permit application. This task will be completed by March 2000.

The DFG is willing to participate in the restoration and management of Hill Slough West. Contracts between all parties would be written and any necessary permits would be issued. The proposed project does not conflict with other projects in the area. Construction would begin in Phase III and would be completed in about two years. The proposed project will comply with all applicable laws and regulations.

Monitoring

Monitoring and Data Evaluation: Monitoring will occur in Phase IV and will include, but will not be limited to: water quality in Hill Slough; fisheries occurrence in the restored tidal wetland; wildlife use patterns in all of the restored areas; and vegetation growth, trends, and recruitment throughout the restoration area to monitor plant composition and makeup. As part of the monitoring plan several testable hypotheses will be developed. Those hypotheses will be related to how fish use the restored tidal wetland as well as how special status plants survive and reproduce. Monitoring will be conducted by IEP staff and qualified staff and volunteers associated with the Hill Slough Wildlife Area.

Local Involvement

The property is located at the Hill Slough Wildlife Area which is owned and managed by the DFG at Grizzly Island Wildlife Area; the proposed project is supported by the DFG manager in the Marsh. The proposed project is also supported by Suisun Resources Conservation District with Mr. Steve Chappell participating in the advisory committee.

Mr. Dennis D. Beebe, Manager for Solano County Mosquito Abatement District has been contacted regarding the proposed project and expressed gratitude for being contacted during the planning stages and happiness to help in any way possible. Mr. Beebe has provided criteria for mosquito prevention (Attachment B).

The following agencies have been contacted by phone for the names of the appropriate staff; these people will be provided with project information in the very near future:

Pacific Gas and Electric Company
Land Department
Mr. Lou Norton

Solano County Transportation
Operations Department
Mr. Evan Stevens, Director

Suisun City
Mr. Otto Butelero

Negative Third Party Impacts: None.

Cost

Total Budget (CALFED) funds only

Direct Labor Hours	Direct Salary and Benefits	Service Contract	Material and Permit Fees	Miscellaneous and other Direct Costs	Overhead and Indirect Costs	Total Cost
9 mons	\$48,900	none	\$4,520	\$2,000	\$9,580	\$65,000

Quarterly Budget

Quarterly Budget Oct-Dec 99	Quarterly Budget Jan-Mar 00	Quarterly Budget Apr-Jun 00	Quarterly Budget Jul-Sep 00	Total Budget
\$25,000	\$20,000	\$10,000	\$10,000	\$65,000

Cost-Sharing

The Hill Slough West Habitat Restoration Demonstration Project is located on property owned and managed by DFG thereby eliminating property acquisition costs. Phases III and IV will be primarily funded using a portion of approximately \$3 million that is set aside from the Suisun Marsh Mitigation Agreement. Fund provided by CALFED will help leverage funding provided through the mitigation agreement to enable Suisun Marsh wetland managers to restore a larger mosaic of tidal wetlands in the Suisun Marsh. The Hill Slough West Restoration Demonstration Project will restore additional tidal wetland habitat beyond the amount required to meet DWR's mitigation obligation.

Applicant Qualifications

The DFG has extensive experience in developing and managing fish and wildlife habitat on numerous wildlife areas throughout the State, managing approximately 15,000 acres in the Suisun Marsh. The principle investigator has worked in the Suisun Marsh for 18 years and has experience with the development of wetland at the Island Slough unit of the Grizzly Island Wildlife Area.

The Advisory Team is composed of experienced botanists and wildlife interpreters and specialists in the science of restoration. Mr. Bob Garrison is the DFG's statewide coordinator of interpretive services. Ms. Sandy Morey is the DFG's endangered plant program coordinator. Mr. Carl Wilcox is a DFG expert in environmental review and regional fish, wildlife, and wetlands planning. Mr. Brenda Grewell is a plant/wetland ecologist with 14

wildlife, and wetlands planning. Mr. Brenda Grewell is a plant/wetland ecologist with 14 years professional experience in California wetlands, including 10 years working with endangered plant and avian species and tidal wetland communities in Suisun Marsh, and is a doctoral student in Ecology with the UC Davis Department of Wildlife, Fish, and Conservation Biology. Mr. Peter Baye of the U.S. Fish and Wildlife Service also serves on the Advisory Committee.

Compliance with Standard Terms and Conditions

No specific deviations from contractual terms and conditions are required for implementation of Phase II of the plan at this time. Should this project move forward, all terms and contracts will be written and submitted to CALFED for approval. The DFG is not aware of any potential conflicts of interest. A completed Form DI-2010 is included in Attachment C of this proposal.

ATTACHMENT A

**CONTRIBUTIONS HILL SLOUGH RESTORATION PROJECT MAKES TO
VISIONS, PROGRAMMATIC ACTIONS, AND OBJECTIVES OF THE
FEBRUARY 1999 ECOSYSTEM RESTORATION PROGRAM PLAN**

VISIONS

SPECIES, COMMUNITY OR LOCATION	BENEFICIAL ACTION	ERPP
Suisun Bay and Marsh Ecological Management Unit	Restoration of natural marsh features such as tidal channels to the Suisun Marsh	ERPP, Volume II, page 131
Bay-Delta Aquatic Foodweb	Restoration of additional tidal wetlands in the Suisun Marsh	ERPP, Volume I, page 98
Tidal Marsh Plant Community	Restoration of additional suitable brackish wetlands	ERPP, Volume I, page 373
Tidal Perennial Aquatic	Restoration of tidal action in diked lands	ERPP, Volume II, page 134
Essential Fish Habitat	Restoration of additional tidal wetlands	ERPP, Volume II, page 125
California Clapper Rail	Restoration of additional suitable brackish wetlands	ERPP, Volume II, page 138
California Black Rail	Restoration of marshes and emergent wetlands in the North Bay	ERPP, Volume II, page 138
Suisun Song Sparrow	Restoration of additional suitable tidal wetlands in the Suisun Marsh	ERPP, Volume II, page 138
Longfin Smelt & Splittail	Restoration of tidal wetlands of the Suisun Marsh	ERPP, Volume II, page 136
Delta Smelt	Restoration of additional tidal wetlands	ERPP, Volume II, page 134
Native Resident Fish Species, Striped Bass, Marine Fishes, Shellfish	Restoration of tidal wetlands improves water quality which helps maintain healthy fish populations	ERPP, Volume II, pages 136-137

PROGRAMMATIC ACTIONS

Bay-Delta Aquatic Foodweb	Restoration of tidal wetlands in the Suisun Bay area	ERPP, Volume II, page 144
Saline Emergent Wetlands	Return acquired wetlands to tidal action	ERPP, Volume II, page 146
California Black Rail	Restoration of additional suitable brackish emergent wetlands	ERPP, Volume I, page 249
Shorebird	Provide tidal foraging habitat	ERPP, Volume I, page 355

OBJECTIVES

Saline Emergent Wetlands	Restoration of saline emergent wetlands to the Suisun Marsh	ERPP, Volume I, page 133
Salt Marsh Harvest Mouse	Restoration of marshland habitat	ERPP, Volume I, page 261
Suisun Ornate Shrew	Restoration of tidal habitat	ERPP, Volume I, page 264
Western Least Bittern	Restoration of tidal action to aquatic habitat	ERPP, Volume I, page 309
Waterfowl	Restoration of tidal sloughs	ERPP, Volume I, page 359

ATTACHMENT B

Solano County Mosquito Abatement District

MILTON WALLACE, President - Rio Vista
RONALD SCHOCK, Vice President - Trustee-at-Large
HOWARD LUTE, Secretary - Suisun
JIM N. WHALEN, Vacaville
MELYIN FROHRIB, Vallejo
GARY RISBERG, Benicia
JOE ANDERSON, Dixon
CHARLES TONNISEN, Fairfield

2950 Industrial Ct.
Fairfield, CA 94533-6500
Telephone (707) 437-1116
Fax (707) 437-1187

DENNIS D. BEEBE, Manager
CAROLEVKHANYAN, Biologist
VICTOR BARACOSA, Supervisor
TAMI WRIGHT, Sec./Bkpr.

Meetings: Second Monday Every Month
7:30 P.M.

March 5, 1999

Laurie Briden
Associate Wildlife Biologist
State of California Department of Fish and Game
Central Valley Bay-Delta Branch
4001 North Wilson Way
Stockton, CA 95205

Dear Ms. Briden:

Subject: Area within Hill Slough Wildlife Area being considered for return to tidal action.

The accumulation of rainwater does occur on the west side of Grizzly Island Road. There have been times in the past when the application of pesticides became necessary (on a small number of acres) to control *Culiseta inornata*. This "cool weather" mosquito is an aggressive biter of humans and has the capability to fly 5-10 miles from its emergence site. With the ever-increasing residential development surrounding the Suisun Marsh, this has been an area of concern for the SCMAD.

The possibility of returning a portion of this area to tidal action may help alleviate this problem in the future, depending upon where the final project site is.

Enclosed is Solano County Mosquito Abatement District (SCMAD) criteria approved by the California Department of Health Services and the Bay Area Conservation and Development Commission for mosquito prevention in:

Drainageway Construction and Maintenance
Permanent Ponds Used as Waterfowl Habitat

Salt Marsh Restoration of Exterior Levee Lands
Tidal Marshes

Please contact the District if you have any questions.

Sincerely,

Dennis D. Beebe
Manager
Carol Evkhanian
Carol Evkhanian
Biologist

SOLANO COUNTY MOSQUITO ABATEMENT DISTRICT
CRITERIA FOR MOSQUITO PREVENTION IN
DRAINAGEWAY CONSTRUCTION AND MAINTENANCE PRACTICES

Background Statement

Mosquitoes breed in creeks and ditches where ponding occurs due to obstructions, overflow of banks, excessive siltation and back-eddys created from low water flow during the dry months. Consequently, modification of drainageways (digging, and filling, etc.) is often necessary to allow free flow of water. Construction of new ditches must be undertaken to maintain adequate circulation of water.

Although obstructions and ponding in creeks and ditches most often occur naturally, alterations to water flow also arise from new construction, refuse deposits and agricultural activities. The correction and costs of such alterations become the responsibility of the person(s) or agency(s) involved when mosquito production results, and abatement expenditures incurred by SCMAD may be billed to the responsible party, pursuant to the procedures set forth in the California Health and Safety Code, Sections 2274 et. seq.

One type of drainageway used to adequately drain low lands in the marsh is called a spreader ditch. This is a small ditch (18 X 18 inches) which drains into a main ditch or tidal water slough. Main ditches direct flow to a water control structure and thence into a tidal water slough.

Policies For Management of Drainageway Construction and Maintenance

1. Water control structures (flap gates, slide gate, weir box, etc.) should be maintained in working condition to facilitate the flooding and complete draining of managed wetlands.
2. Clear and retrench spreader ditches approximately every three years.
3. Excavate or dredge existing main ditches when necessary.
4. Repair levees and remove debris and vegetation which are obstructing natural stream channels if such materials create a situation which may endanger public health and safety.
5. Fill isolated potholes (depressions found in marsh areas) which may create mosquito problems and cannot feasibly be connected to circulating water.
6. Connect pools (depressions found in streambeds) to the main flow of water by minor hand ditching when it appears that they are problem mosquito breeding sites.
7. Maintain all access roads and levees in good repair to allow continuous mosquito surveillance, and provide access for control equipment.
8. Install and maintain water control structures whenever possible to expedite flood water removal.

The preceding mosquito prevention criteria are intended only to offer guidance when considering the development of design options during the planning process for projects. Be advised that these practices have been found to be effective, however, once the project has been completed it is essential that conscientious maintenance and management practices be followed to help ensure the successful prevention of mosquito production.

Be further advised that under the California Health and Safety Code (Sections 2274 et. seq.) the responsibility for the cost of mosquito control may fall on the property owner.

SOLANO COUNTY MOSQUITO ABATEMENT DISTRICT
CRITERIA FOR MOSQUITO PREVENTION IN
PERMANENT PONDS USED AS WATERFOWL HABITAT

Background Statement

The diversity of waterfowl habitat in the Suisun Marsh is increased by the occurrence of permanent ponds. Permanent ponds, however, should remain a minor part of the marsh habitat because (1) they require specific conditions to provide optimum habitat and (2) other more intensive types of management can generally be carried out that provide for higher yields of waterfowl food.

Seeding of permanent ponds is not necessary since plants such as sago pondweed and widgeongrass should become established in the ponds naturally.

Policies For Management of Permanent Ponds

Establishment:

1. Permanent ponds are recommended only in areas where at least 70% of the total permanent water area will be maintained year round at a minimum depth of 3.5 to 4 feet. This depth limits the occurrence of cattails and tules and stimulates the production of desirable pondweeds.
2. Levees surrounding permanent ponds must have a shelf on which cattails and tules can become established to serve as a buffer against wave action.
3. Permanent ponds should be established only in areas where the gates and ditches can provide maximum circulation of water without fluctuation in water level.

Maintenance:

1. Set gates to allow maximum circulation without change in water level. Maintain circulation year round, but especially during the warmer months (April-Sept.). Poor circulation during these months could increase salinity, mosquito reproduction, and the probability of botulism.
2. Once every five years, completely drain the pond in February and keep it dry through September. This will control carp populations, allow oxidation of the sediment in pond bottoms resulting in the release of nutrients, and allow for mowing or burning of undesirable vegetation. At this time an inspection of gates and levees will be undertaken and needed repairs will be made.

The preceding mosquito prevention criteria are intended only to offer guidance when considering the development of design options during the planning process for projects. Be advised that these practices have been found to be effective, however, once the project has been completed it is essential that conscientious maintenance and management practices be followed to help ensure the successful prevention of mosquito production.

Be further advised that under the California Health and Safety Code (Sections 2274 et. seq.) the responsibility for the cost of mosquito control may fall on the property owner.

SOLANO COUNTY MOSQUITO ABATEMENT DISTRICT
CRITERIA FOR MOSQUITO PREVENTION IN
SALT MARSH RESTORATION OF EXTERIOR LEVEE LANDS

Background Statement

These lands were originally tidal marshes, vegetated areas subject to daily tidal action. They were reclaimed for agricultural and other uses by the construction of levees and the installation of one or more water control structures to control the inflow and outflow of water. The Suisun Marsh Protection Plan recommends the restoration of former tidal marshes to tidal action where and when possible.

Salt marsh restoration projects on former exterior areas generally have a great potential for producing large numbers of mosquitoes. At least one mosquito species produced in these types of areas is an aggressive pest of man and is capable of flying in excess of 20 miles. Mosquito control in California has its origin in the San Francisco Bay Area where efforts were undertaken to control this pest by ditching to enhance drainage and water circulation.

Removing or breaching the levee will subject the sites to tidal flow. The extent of tidal flow depends, of course, on the relative elevation of the site to tide. Tidal flushing itself does not create mosquito problems. Mosquito problems arise from the residual tidal and flood waters remaining in depressions and cracked ground.

The following District Practices should be considered prior to removal or breaching of any levee or water control structure.

Policies for Management of Salt Marsh Restoration of Exterior Levee Lands

1. Develop a management program for the control of mosquitoes. Such a plan should be developed in coordination with the Solano County Mosquito Abatement District (SCMAD).
2. If necessary, obtain an engineering survey to locate depressions that would retain tidal water, and to determine the location of ditches for water circulation and drainage.
3. Establish a water recirculation system by interconnecting depressions with ditches that will enhance water movement and provide access for predator fish.
4. Disk or harrow all cracked ground caused by shrinkage and subsidence.
5. Plan and fund a long-term maintenance program on the marsh. The maintenance should include:
 - a. Dredging and cleaning of sloughs, spreader ditches and main ditches to provide adequate water circulation.
 - b. Disking of cracked ground as needed.
 - c. Maintenance and repair of water control structures.

The preceding mosquito prevention criteria are intended only to offer guidance when considering the development of design options during the planning process for projects. Be advised that these practices have been found to be effective, however, once the project has been completed it is essential that conscientious maintenance and management practices be followed to help ensure the successful prevention of mosquito production.

Be further advised that under the California Health and Safety Code (Sections 2274 et. seq.) the responsibility for the cost of mosquito control may fall on the property owner.

**SOLANO COUNTY MOSQUITO ABATEMENT DISTRICT
CRITERIA FOR MOSQUITO PREVENTION IN
TIDAL MARSHES**

Background Statement

Historically, tidal marshes in Solano County were prolific sources of mosquitoes, an aggressive, migrating, day-biting species. In addition to direct abatement, water management practices have been developed by the Solano County Mosquito Abatement District (SCMAD) to prevent the production of mosquitoes in tidal marshes. The principal prevention method consists of the construction of ditches to circulate tidal water into sloughs and bays to avoid ponding. The following recommendations should be considered to reduce the mosquito production in tidal marshes.

Policies For Tidal Marsh Management

1. All marsh lands should be periodically surveyed to determine if ditches and drainage water control structures are properly placed to ensure effective drainage.
2. Ensure that all spreader ditches are constructed and maintained free and clear of debris and vegetation. Clear and retrench approximately every three years.
3. Spreader ditches should be properly connected to a slough via a main ditch or by having a flap gate, weir box or other adequate water control mechanism.
4. The drainage capacity of the drainage systems (spreader and main ditches) should take no more than 5 days to ensure full removal of water from the surface to the marsh prior to potential mosquito production.
5. To ensure the effectiveness of the drainage system and water control structures for the prevention of mosquitoes, the SCMAD will conduct surveillance after each bi-monthly high tide.

The preceding mosquito prevention criteria are intended only to offer guidance when considering the development of design options during the planning process for projects. Be advised that these practices have been found to be effective, however, once the project has been completed it is essential that conscientious maintenance and management practices be followed to help ensure the successful prevention of mosquito production.

Be further advised that under the California Health and Safety Code (Sections 2274 et. seq.) the responsibility for the cost of mosquito control may fall on the property owner.

9/92

U.S. Department of the Interior

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; use this form for certification and sign; or use Department of the Interior Form 1954 (DI-1954). (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 from covered transactions 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.

DI-1014
March 1995
This form consolidates DI-1953, DI-1954,
DI-1955, DI-958 and DI-1983

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

COPY ORIGINAL SIGNED BY
ALAN BARRAGO

TYPED NAME AND TITLE Perry L. Herrgesell, Chief

DATE

Public reporting burden for this collection of information is estimated to average 45 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 (0348-0043), 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.**

This is a standard form used by applicants as a required facesheet for preapplications and applications submitted for Federal assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review the applicant's submission.

- | Item: | Entry: | Item: | Entry: |
|-------|---|-------|--|
| 1. | Self-explanatory. | 12. | List only the largest political entities affected (e.g., State, counties, cities). |
| 2. | Date application submitted to Federal agency (or State if applicable) and applicant's control number (if applicable). | 13. | Self-explanatory. |
| 3. | State use only (if applicable). | 14. | List the applicant's Congressional District and any District(s) affected by the program or project. |
| 4. | If this application is to continue or revise an existing award, enter present Federal identifier number. If for a new project, leave blank. | 15. | Amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate <i>only</i> the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15. |
| 5. | Legal name of applicant, name of primary organizational unit which will undertake the assistance activity, complete address of the applicant, and name and telephone number of the person to contact on matters related to this application. | 16. | Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process. |
| 6. | Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service. | 17. | This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes. |
| 7. | Enter the appropriate letter in the space provided. | 18. | To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.) |
| 8. | Check appropriate box and enter appropriate letter(s) in the space(s) provided:

-- "New" means a new assistance award.

-- "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date.

-- "Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation. | | |
| 9. | Name of Federal agency from which assistance is being requested with this application. | | |
| 10. | Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested. | | |
| 11. | Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project. | | |

FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

1. TYPE OF SUBMISSION:		2. DATE SUBMITTED April 16, 1999	Applicant Identifier
Application <input type="checkbox"/> Construction <input checked="" type="checkbox"/> Non-Construction	Preapplication <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction	3. DATE RECEIVED BY STATE	State Application Identifier
		4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier

APPLICANT INFORMATION

1. NAME: California Department of Fish and Game	ORGANIZATIONAL UNIT: Central Valley Bay-Delta Branch
2. ADDRESS (give city, county, State, and zip code): 4001 N. Wilson Way Stockton, CA 95205	3. NAME AND TELEPHONE NUMBER OF PERSON TO BE CONTACTED ON MATTERS INVOLVING THIS APPLICATION (give area code): Frank Wernette (209) 948-7800

4. EMPLOYER IDENTIFICATION NUMBER (EIN): []-[]-[]-[]-[]-[]-[]-[]-[]-[]-[]	7. TYPE OF APPLICANT: (enter appropriate letter in box) <input checked="" type="checkbox"/> A A. State B. County C. Municipal D. Township E. Interstate F. Intermunicipal G. Special District H. Independent School Dist. I. State Controlled Institution of Higher Learning J. Private University K. Indian Tribe L. Individual M. Profit Organization N. Other (Specify) _____
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5. TYPE OF APPLICATION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision Revision, enter appropriate letter(s) in box(es) [] [] A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration Other/specify: _____	9. NAME OF FEDERAL AGENCY:
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6. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: []-[]-[]-[]-[]-[]	11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: Hill Slough West Habitat Restoration, Phase II Demonstration Project
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8. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.): Solano County	
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13. PROPOSED PROJECT	14. CONGRESSIONAL DISTRICTS OF: Doug Ose; District 3
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15. START DATE 10/99	15. ENDING DATE 4/00	15. a. APPLICANT CA Dept. of Fish and Game	15. b. PROJECT Hill Slough West, Phase II
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16. ESTIMATED FUNDING: \$65,000	16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS? a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE _____ b. No. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E. O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW
Federal \$55,000	
Applicant \$ _____	
State \$ _____	
Local \$ _____	
Other \$ _____	
Program income \$ _____	
TOTAL \$65,000	
	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? <input type="checkbox"/> Yes If "Yes," attach an explanation. <input checked="" type="checkbox"/> No

I, TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

18. Type Name of Authorized Representative Perry L. Hergesell	18. b. Title Chief	18. c. Telephone Number (209) 948-7800
18. Signature of Authorized Representative		18. e. Date Signed April 15, 1999

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Standard Form 424 (Rev. 7-97)
Prescribed by OMB Circular A-102

ASSURANCES - NON-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 (0348-0040), 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 awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

I, 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 cost) 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 award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. 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.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4783) relating to prescribed standards for merit systems for programs funded under one of the 19 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).
6. Will comply with all Federal statutes relating to nondiscrimination. 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. 92-255), as amended, relating to nondiscrimination 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 nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. 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 provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with 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.

INSTRUCTIONS FOR THE SF-424A

Public reporting burden for this collection of information is estimated to average 130 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 (0348-0044), 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.

General Instructions

This form is designed so that application can be made for funds from one or more grant programs. In preparing the budget, adhere to any existing Federal grantor agency guidelines which prescribe how and whether budgeted amounts should be separately shown for different functions or activities within the program. For some programs, grantor agencies may require budgets to be separately shown by function or activity. For other programs, grantor agencies may require a breakdown by function or activity. Sections A, B, C, and D should include budget estimates for the whole project except when applying for assistance which requires Federal authorization in annual or other funding period increments. In the latter case, Sections A, B, C, and D should provide the budget for the first budget period (usually a year) and Section E should present the need for Federal assistance in the subsequent budget periods. All applications should contain a breakdown by the object class categories shown in Lines a-k of Section B.

Section A. Budget Summary Lines 1-4 Columns (a) and (b)

For applications pertaining to a *single* Federal grant program (Federal Domestic Assistance Catalog number) and *not* requiring a functional or activity breakdown, enter on Line 1 under Column (a) the catalog program title and the catalog number in Column (b).

For applications pertaining to a *single* program requiring budget amounts by multiple functions or activities, enter the name of each activity or function on each line in Column (a), and enter the catalog number in Column (b). For applications pertaining to multiple programs where none of the programs require a breakdown by function or activity, enter the catalog program title on each line in Column (a) and the respective catalog number on each line in Column (b).

For applications pertaining to a *multiple* programs where one or more programs require a breakdown by function or activity, prepare a separate sheet for each program requiring the breakdown. Additional sheets should be used when one form does not provide adequate space for all breakdown of data required. However, when more than one sheet is used, the first page should provide the summary totals by programs.

Lines 1-4, Columns (c) through (g)

For new applications, leave Columns (c) and (d) blank. For each line entry in Columns (a) and (b), enter in Columns (e), (f), and (g) the appropriate amounts of funds needed to support the project for the first funding period (usually a year).

For continuing grant program applications, submit these forms before the end of each funding period as required by the grantor agency. Enter in Columns (c) and (d) the estimated amounts of funds which will remain unobligated at the end of the grant funding period only if the Federal grantor agency instructions provide for this. Otherwise, leave these columns blank. Enter in Columns (e) and (f) the amounts of funds needed for the upcoming period. The amount(s) in Column (g) should be the sum of amounts in Columns (e) and (f).

For supplemental grants and changes to existing grants, do not use Columns (c) and (d). Enter in Column (e) the amount of the increase or decrease of Federal funds and enter in Column (f) the amount of the increase or decrease of non-Federal funds. In Column (g) enter the new total budgeted amount (Federal and non-Federal) which includes the total previous authorized budgeted amounts plus or minus, as appropriate, the amounts shown in Columns (e) and (f). The amount(s) in Column (g) should not equal the sum of amounts in Columns (e) and (f).

Line 5—Show the totals for all columns used.

Section B. Budget Categories

In the column headings (1) through (4), enter the titles of the same programs, functions, and activities shown on Lines 1-4, Column (a), Section A. When additional sheets are prepared for Section A, provide similar column headings on each sheet. For each program, function or activity, fill in the total requirements for funds (both Federal and non-Federal) by object class categories.

Lines 6a-f—Show the totals of Lines 6a and 6b in each column.

Line 6j—Show the amount of indirect cost.

Line 6k—Enter the total of amounts on Lines 6i and 6j. For all applications for new grants and continuation grants the total amount in column (5), Line 6k, should be the same as the total amount shown in Section A, Column (g), Line 5. For supplemental grants and changes to grants, the total amount of the increase or decrease as shown in Columns (1)-(4), Line 6k should be the same as the sum of the amounts in Section A, Columns (e) and (f) on Line 5.

Line 7—Enter the estimated amount of income, if any, expected to be generated from this project. Do not add or subtract this amount from the total project amount. Show under the program.

INSTRUCTIONS FOR THE SF-424A (continued)

narrative statement the nature and source of income. The estimated amount of program income may be considered by the federal grantor agency in determining the total amount of the grant

Section C. Non-Federal Resources

Lines 8-11--Enter amounts of non-Federal resources that will be used on the grant. If in-kind contributions are included, provide a brief explanation on a separate sheet.

Column (a) - Enter the program titles identical to **Column (a)**, Section A. A breakdown by function or activity is not necessary.

Column (b) - Enter the contribution to be made by the applicant.

Column (c) - Enter the amount of the State's cash and in-kind contribution if the applicant is not a State or State agency. Applicants which are a State or State agencies should leave this column blank.

Column (d) - Enter the amount of cash and in-kind contributions to be made from all other sources.

Column (e) - Enter totals of **Columns (b)**, **(c)**, and **(d)**.

Line 12--Enter the total for each of **Columns (b)-(e)**. The amount in **Column (e)** should be equal to the amount on **Line 5**, **Column (f)** Section A.

Section D. Forecasted Cash Needs

Line 13--Enter the amount of cash needed by quarter from the grantor agency during the first year.

Line 14--Enter the amount of cash from all other sources needed by quarter during the first year.

Line 15--Enter the totals of amounts on **Lines 13** and **14**.

Section E. Budget Estimates of Federal Funds Needed for Balance of the Project.

Lines 16-19-Enter in **Column (a)** the same grant program titles shown in **Column (a)**, Section A. A breakdown by function or activity is not necessary. For new applications and continuation grant applications, enter in the proper columns amounts of Federal funds which will be needed to complete the program or project over the succeeding funding period (usually in years). This section need not be completed for revisions (amendments, changes, or supplements) to funds for the current year of existing grants.

If more than four lines are needed to list the program titles, submit additional schedules as necessary.

Line 20--Enter the total for each of the **Columns (b)-(e)**. When additional schedules are prepared for this Section, annotate accordingly and show the overall totals on this line.

Section F. Other Budget Information

Line 21--Use this space to explain amounts for individual direct object-class cost categories that may appear to be out of the ordinary or to explain the details as required by the Federal grantor agency.

Line 22--Enter the type of indirect rate (provisional, predetermined, final or fixed) that will be in effect during the funding period, the estimated amount of the base to which the rate is applied, and the total indirect expense.

Line 23--Provide any other explanations or comments deemed necessary.

BUDGET INFORMATION - Non-Construction Programs

SECTION A: BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Hill Slough Restoration		\$	\$	\$ 65,000	\$	\$ 65,000
2.						
3.						
4.						
5. Totals		\$	\$	\$ 65,000	\$	\$ 65,000

SECTION B: BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
a. Personnel	\$	\$	\$ 35,525	\$	\$ 35,525
b. Fringe Benefits			13,375		13,375
c. Travel			500		500
d. Equipment					
e. Supplies			520		520
f. Contractual					
g. Construction					
h. Other			3,500		3,500
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. TOTALS (sum of 6i and 6j)	\$	\$	\$ 65,000	\$	\$ 65,000
7. Program Income	\$	\$	\$ 0	\$	\$ 0

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS	
8.	\$	\$	\$	\$	
9.					
10.					
11.					
12. TOTAL (sum of lines 8 - 11)	\$	\$	\$	\$ 0	
SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 65,000	\$ 25,000	\$ 20,000	\$ 10,000	\$ 10,000
14. NonFederal					
15. TOTAL (sum of lines 13 and 14)	65,000	25,000	20,000	10,000	10,000
SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program	FUTURE FUNDING PERIODS (Years)				
	(b) First	(c) Second	(d) Third	(e) Fourth	
16. Hill Slough Restoration, Phase II	\$ 25,000	\$ 20,000	\$ 10,000	\$ 10,000	
17.					
18.					
19.					
20. TOTAL (sum of lines 16-19)	\$ 25,000	\$ 20,000	\$ 10,000	\$ 10,000	
SECTION F - OTHER BUDGET INFORMATION					
21. Direct Charges:		22. Indirect Charges:			
23. Remarks:					

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