

C1050

Proposal for:

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

Submitted to:

**CALFED BAY-DELTA PROGRAM
1416 Ninth Street, Suite 1155
Sacramento, CA 95814**

Submitted by:

**MOFFATT & NICHOL ENGINEERS
3000 Citrus Circle, Suite 230
Walnut Creek, CA 94598**

**DEPARTMENT OF PARKS AND RECREATION
State of California
101 J Street
Sacramento, CA 95814**

**DEPARTMENT OF WATER RESOURCES
State of California
3251 S Street
Sacramento, CA 95816**

July 2, 1998

M&N File No. 98183

Attachment H

COVER SHEET (PAGE 1 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Proposal Title: Franks Tract State Recreation Area Wetlands Habitat Restoration Phase II: Demonstration Island Construction & Monitoring
Applicant Name: Moffatt & Nichol Engineers
Mailing Address: 3000 Citrus Circle, Suite 230, Walnut Creek, CA 94598
Telephone: 925-944-5411
Fax: 925-944-4732

Amount of funding requested: \$ 4,971,000 for 5 years

Indicate the Topic for which you are applying (check only one box). Note that this is an important decision: see page ___ of the Proposal Solicitation Package for more information.

- | | |
|---|---|
| <input type="checkbox"/> Fish Passage Assessment | <input type="checkbox"/> Fish Passage Improvements |
| <input checked="" type="checkbox"/> Floodplain and Habitat Restoration | <input type="checkbox"/> Gravel Restoration |
| <input type="checkbox"/> Fish Harvest | <input type="checkbox"/> Species Life History Studies |
| <input type="checkbox"/> Watershed Planning/Implementation | <input type="checkbox"/> Education |
| <input type="checkbox"/> Fish Screen Evaluations - Alternatives and Biological Priorities | |

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

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

Indicate the primary species which the proposal addresses (check no more than two boxes):

- | | |
|--|--|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | |
| <input checked="" type="checkbox"/> Winter-run chinook salmon | <input type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon | <input type="checkbox"/> Fall-run chinook salmon |
| <input checked="" type="checkbox"/> Delta smelt | <input type="checkbox"/> Longfin smelt |
| <input type="checkbox"/> Splittail | <input type="checkbox"/> Steelhead trout |
| <input type="checkbox"/> Green sturgeon | <input type="checkbox"/> Striped bass |
| <input type="checkbox"/> Migratory birds | |

COVER SHEET (PAGE 2 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

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

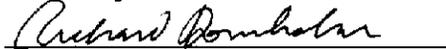
- | | |
|--|---|
| <input type="checkbox"/> State agency | <input type="checkbox"/> Federal agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input type="checkbox"/> Non-profit |
| <input type="checkbox"/> Local government/district | <input checked="" type="checkbox"/> Private party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

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

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Planning | <input checked="" 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 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 II.K) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

(Signature of Applicant)

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

EXECUTIVE SUMMARY

a. Project Title and Applicant Name

Project Title: Franks Tract State Recreation Area Wetlands Habitat Restoration
Phase II: Demonstration Island Construction and Monitoring

Co-Applicants: Moffatt & Nichol Engineers (MNE)
California Department of Parks and Recreation (DPR)
California Department of Water Resources (DWR)

- b. Project Description and Primary Biological/Ecological Objectives** - Franks Tract State Recreation Area ("SRA"), located in Contra Costa County, consists of two flooded Delta tracts totaling approximately 3300 acres owned by the State of California and operated by the DPR. In 1990, DPR contracted with MNE to prepare an engineering Feasibility Study of constructing demonstration islands to bolster the fish and wildlife resources of the SRA, serve as effective wave barriers to help protect the levees of neighboring islands, and expand the SRA's land base for recreational uses, in accordance with the goals of the General Plan for the SRA. The MNE study identified numerous opportunities for island construction, and demonstrated the feasibility of obtaining and placing material to form islands that would meet the General Plan goals.

The Co-Applicants submitted a joint proposal to CALFED in July 1997 for funding of a phased project to construct the demonstration islands. The first phase of this effort consisting of completion of the CEQA environmental review and permit process, and preparation of construction documents has been funded through a grant from CALFED. A contract for this work has been negotiated and is scheduled to begin July 1, 1998, and to complete by June 30, 1999.

The Co-Applicants intend to proceed with the second phase consisting of construction and monitoring of the demonstration islands, for which this application is made. The islands will provide primary ecological benefits for the CALFED priority species by restoring 45 acres of the existing deeply flooded habitat to a combination of shallow tidal perennial and intertidal habitat, fresh emergent wetlands habitat, and midchannel islands and shoal habitat. The location of Franks Tract SRA and a Site Map showing the demonstration island locations are presented in Exhibits 1a and 1b.

- c. Approach/Tasks/Schedule** - The proposed project consists of construction, construction management, and pre and post construction monitoring. The

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

proposed schedule allows 24 months for completion of construction and an additional 36 months for completion of monitoring.

- d. **Justification for Project and Funding by CALFED** - The project is justified because it directly accomplishes CALFED's restoration objectives for priority habitat types identified in the Ecosystem Restoration Program Plan (ERPP) within the Central and West Delta ecological unit as shown on Exhibit II. The use of CALFED's funds is necessary because the DPR and DWR are otherwise unable to fund the project, which has been in the works since 1989.
- e. **Budget Costs and Third Party Impacts** - The budget request for the project is \$4,250,000 for construction, \$619,000 for construction management, and \$102,000 for environmental support, including supplemental permit assistance and monitoring. The total amount requested from CALFED is \$4,971,000.

Some third party impacts have been identified. Neighboring island flood protection levees will benefit due to enhanced wave sheltering. SRA Recreationists will benefit due to ecosystem restoration. State Water Agencies will benefit due to reduced risk of water quality degradation resulting from levee breaks on neighboring islands.

- f. **Applicant Qualifications** - MNE is a California based firm with over 50 years specialized experience in Civil and Coastal Engineering. The firm has completed numerous large coastal wetlands restoration projects, as well as several Delta Wetlands projects. DPR and DWR are the State sponsors of the proposed project.
- g. **Monitoring and Data Evaluation** - Construction monitoring will assess the efficacy of the demonstration island construction materials and methods. Pre and post ecological and biological monitoring will evaluate the overall success of the habitat restoration.
- h. **Local Support/Coordination with other Programs/Compatibility with CALFED Objectives** - Local and State support, primarily due to wave suppression benefits for neighboring island levees, was apparent during the initial planning and preliminary engineering study. Public meetings at the time produced no opposition. State and Federal resource agencies were involved in the developing the proposed project. The habitat restoration goals of the project are based on the Resource Management Goals of DPR and the specific CALFED ERPP objectives shown on Exhibit II. The project also meets the objective of reducing flood plain risks.

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

TITLE PAGE

- a. **Title of Project:** Franks Tract State Recreation Area Wetlands Habitat Restoration
Phase II: Demonstration Island Construction and Monitoring
- b. **Applicant Information:** Moffatt & Nichol Engineers (Co-Applicant)
Contact: Richard Dornhelm, P.E.
3000 Citrus Circle, Suite 230
Walnut Creek, CA 94598
Tel: 925-944-5411, Fax: 925-944-4732, Email: rdornhelm@moffattnichol.com
- Department of Parks and Recreation State of California (Co-Applicant)
Contact: Ronald Brean, Gold Rush District Superintendent
101 J Street
Sacramento, CA 95814
Tel: 916-445-7373, Fax: 916-327-3872
- Department of Water Resources State of California (Co-Applicant)
Contact: Curt Schmutte, Flood Protection and Geographic Information Branch
Central District Chief
3251 S Street
Sacramento, CA 95816
Tel: 916-227-7567, Fax: 916-227-7600, Email: schmutte@water.ca.gov.
- c. **Type of Organization and Tax Status:** Moffatt & Nichol Engineers is a private, for profit environmental engineering company. The Department of Parks and Recreation and the Department of Water Resources are agencies of the State of California.
- d. **Tax Identification Number:** Moffatt & Nichol Engineers Tax Identification Number: 95-1951343
Department of Parks and Recreation Tax Identification Number: 52-1692634
Department of Water Resources Tax Identification Number: 68-0303606
- e. **Participants/Collaborators in Implementation:** Co-Applicants in Item b have entered into a formal agreement to collaborate (see MOU Exhibit VI).
Jones & Stokes Associates, Inc. – Environmental Sub-Consultants
Hultgren-Tillis Engineers – Geotechnical Sub-Consultants
Towill, Inc. – Surveying Sub-Consultant

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

PROJECT DESCRIPTION

a. Project Description and Approach

Franks Tract State Recreation Area (SRA), located in Contra Costa County, consists of two flooded Delta Tracts totaling approximately 3300 acres owned by the State of California and operated by the Department of Parks and Recreation (DPR). In 1990, DPR contracted with Moffatt & Nichol Engineers (MNE) to prepare an engineering feasibility study of constructing demonstration islands to bolster the fish and wildlife resources of the SRA, serve as effective wave barriers to help protect the levees of neighboring islands, and expand the SRA's land base for recreational use, in accordance with the goals of the General Plan for the SRA.

The MNE Study considered the feasibility of island construction in great detail. It included extensive hydrographic, topographic and geophysical field surveys. It also included detailed analyses of wind and wave conditions, tidal hydraulics and sediment transport. A section prepared by a wildlife biologist addressed existing habitat values and the potential for improvement of fish and wildlife resource values, among other non-engineering criteria. The study evaluated alternative sources of material for island construction, including the use of channel dredging spoils, but concluded that the most appropriate source was relic sand dunes in the submerged portion of the tract. Sediment samples from the selected borrow sites were analyzed for potentially objectionable constituents. The study described excavation and material placement methods to minimize water quality impacts during construction and help insure the formation of a stable island substrate for the establishment of tidal perennial aquatic habitat, shaded riverine aquatic habitat, and midchannel islands and shoals habitat. The study recommended the construction of four demonstration islands along Piper Slough and estimated construction costs for the work.

The Co-Applicants submitted a joint proposal to CALFED in July 1997 for funding of a phased project to construct the demonstration islands. The first phase of this effort consisting of completion of the CEQA environmental review and permit process, and preparation of construction documents has been funded through a grant from CALFED #97-N12 in the November 1997 funding cycle. A contract for this work has been negotiated with the National Fish and Wildlife Federation (NFWF) and is scheduled to begin July 1, 1998, and to complete by June 30, 1999.

The co-applicants intend to proceed with the second phase consisting of construction and monitoring of the demonstration islands that provide primary ecosystem benefits to fish and wildlife resources, and secondary flood protection

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

benefits for neighboring islands. Given the substantial amount of study effort invested by DPR, the preconstruction services (Phase I) funded by CALFED, and the considerable support for the project by the public interest groups and resource agencies that participated in the numerous project meetings, the project should be ready to start construction within about one year.

The project consists of the construction of low islands in the flooded portion of Franks Tract, where existing water depths are typically about 10 ft. at mean tide level (MTL). The islands will be constructed as either stand-alone features or by extension of existing remnant levees using available on-site sand/peat soil. The minimum project will restore approximately 45 acres of deeply flooded habitat to 34 acres of shallow tidal perennial and intertidal habitat, and 11 acres of fresh emergent wetlands habitat. The proportions of the habitat types to be created may be adjusted during Phase I to better reflect CALFED ecosystem restoration objectives. The project can also be adapted to create midchannel islands and shoals habitat. The ability to restore these CALFED priority habitat types at Franks Tract is limited primarily by funding availability. The resource management goals of DPR favor restoration of parklands to their former (pre-modern) conditions, and are consistent with those of CALFED.

The project provides substantial ecosystem restoration benefits targeting CALFED's priority habitat types and species, as well as other significant benefits. These include flood protection due to wave sheltering for adjacent island levees that require greater than normal maintenance (and the attendant adverse impacts on stream bank habitat) because of the long open water fetches on Franks Tract, and recreational opportunity in a park setting for the public to experience the Delta ecosystem in a restored state.

b. Proposed Scope of Work

The proposed Scope of Work for completing Phase II of the project, with a list of tasks and deliverable items, is presented in Exhibit V. Technical and financial reports will be prepared and submitted to CALFED on a monthly basis for the duration of construction summarizing the progress on task completion, discussing specific problems or noteworthy events, and tracking expenditure of grant funds. Reports will be submitted annually for the ecological and biological monitoring program.

c. Location

The proposed project is located at the Franks Tract State Recreation Area (SRA) in Contra Costa County as shown on Exhibit Ia. The SRA consists of two flooded

FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING

Delta Tracts, Franks Tract and Little Franks Tract, as shown on Exhibit 1b. The area was submerged by levee breaks in the late 1930's before its acquisition by the State. The area is bordered by remnant levees and is accessible only by boat.

d. Expected Benefits

Franks Tract is currently flooded over 95% of its area. The existing water depths vary from about 7 feet MTL in the shallow portions, to about 20 feet MTL in the deeper portions where peat mining (prior to the levee breaks) once occurred, and averages about 10 feet MTL. The proposed project will restore about 45 acres from deeply flooded habitat to a combination of specific CALFED priority habitat types. Considering the 3300 acre expanse of Franks Tract, the loss of some subtidal habitat is more than compensated by the benefits associated with creation of the priority habitat types and the added diversity. Exhibit II identifies the specific CALFED ERPP objectives that are targeted by this project. The primary benefits of the project are all those benefits directly or indirectly associated with the habitat restoration both to CALFED and to the resource management goals of the DPR. The secondary benefits are flood protection for adjacent islands in the form of wave sheltering for the fragile levees, and recreation in the form of opportunity for the public to experience the Delta in a restored state. Furthermore, implementation of the proposed project has progressed due to the funding provided by DPR and by CALFED. The opportunity exists for CALFED to obtain tangible benefits for the targeted species relatively quickly, and to apply the ERPP adaptive management approach for the benefit of future restoration projects.

e. Background and Biological/Technical Justification

The biological justification for the project is the tangible benefits for the CALFED priority species that would result from the restoration of a portion of the deeply flooded habitat on Franks Tract to shallow tidal perennial and intertidal habitat, fresh emergent wetlands habitat, and midchannel islands and shoal habitat. Dredge Material Islands (DMI's) similar to those in the proposed project have been constructed by the U.S. Army Corps of Engineers at Venice Cut and Donlon Islands using dredged material from the Stockton Deepwater Channel project. These islands are also noteworthy because of the monitoring that preceded and followed their construction about 9 years ago, which documents the Corps' largely successful effort to restore midchannel island and shoal habitat. The wetland design parameters that allowed the targeted plant and animal communities to be established on the DMI's were used by MNE in the preliminary engineering for the project.

The durability of the project is a concern because the island sites on Franks Tract

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

are relatively exposed to long open water fetches. The coastal engineering expertise of MNE in wind wave analyses, 'soft' techniques for shoreline stabilization and sediment transport processes served as the basis for selecting island sites and stable island configurations. Techniques to facilitate rapid establishment of shoreline vegetation were incorporated in the project for ecosystem as well as engineering reasons. By providing monitoring and pro-active resource management by a dedicated Resources Agency in the post-construction phase, the long term benefits to the ecosystem can be assured.

The project differs from other similar projects in that material for island construction will be dredged from on-site sources. The MNE Study identified relic sand dunes and peat soils on Franks Tract that can be used for this purpose. Alternatively, suitable dredged material from other projects, including other CALFED projects attempting to create wetlands by removal of previously placed dredged material, could be considered on an opportunity basis. However, if large scale habitat restoration is to take place, the efficacy of on-site sources must be demonstrated, as the availability of suitable channel deepening spoils becomes increasingly scarce. Furthermore, due to the flooding of Franks Tract in the late 1930's, and cessation of agricultural activities, the subtidal elevations in the tract are on average only 10 ft. below MTL, rather than 15 ft. to 20 ft. as on most other reclaimed tracts, greatly reducing the volume of fill needed to develop the proposed islands. The concern over flooding of agricultural tracts and the consequences on water quality should not be an issue at Franks Tract, since it has been flooded for nearly 60 years. Finally, land acquisition is not an issue, since the land is already in State ownership.

The proposed project is a continuing project. The concept of constructing dredge material islands was incorporated into the General Plan for the SRA prepared in 1989. The feasibility of the concept was demonstrated by the MNE study. DPR invested approximately \$350,000 into island planning and preliminary engineering. CALFED has invested \$232,250 in Phase I Pre-Construction Services. The development of the proposed project by DPR included numerous meetings with the public and representatives of the various resource agencies. Reaction to the proposed demonstration islands was favorable, and no apparent opposition to the project emerged.

f. Monitoring and Data Evaluation

Pre and post-construction Monitoring is necessary to demonstrate the efficacy of the proposed demonstration islands in restoring the targeted habitat types and aiding the targeted species. The monitoring program is being defined during Phase I (pre-construction services) as part of the Environmental Certification and Permit

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

Process.

The task of monitoring construction activity is included with Phase II work. As a demonstration project, the monitoring will not only be directed at the usual concern over conformance by the construction contractor with the requirements of the plans and specifications, but also with evaluation of the constructability of the innovative engineering features incorporated in the design.

g. Implementability

Due to the planning and engineering already underway, implementation of the proposed project is relatively straight forward. The demonstration project was formulated in compliance with current (1990) laws and regulations, and resource agency concerns. Several public meetings were conducted and no apparent opposition to the proposed project surfaced. The restoration of the priority habitat types by construction of islands at Franks Tract does not appear to conflict with, or compromise CALFED's mission, or its developing implementation strategy.

Local and State reaction to the project has been favorable primarily because of perceived flood protection benefits. Local concern has always existed over high levee maintenance and vulnerability due to the long open water fetches on Franks Tract. Water agency concern has existed over the risk of water quality degradation resulting from levee breaks on neighboring islands. Concerns by recreational boaters, hunters and fisherman that frequent the area were addressed in the development of the project.

Land uses will not be altered by the proposed project. The area has been, and will remain in Park use.

Sediment tests during the Preliminary Engineering Study did not detect significant levels of compounds considered hazardous under California Admin Code Title 22 procedures. Heavy metals detected in the area soils appeared to represent background levels; no other potentially hazardous compounds were detected.

Title to the land within Franks Tract already resides with the State of California.

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

COSTS AND SCHEDULE TO IMPLEMENT PROPOSED PROJECT

a. Budget Costs

Budget costs are presented on Exhibit III. The Construction Cost Estimate is based on the 1991 MNE study, inflated to the proposed date of construction (1999). This proposal requests CALFED funding of all Phase II tasks.

CALFED funding is required to implement the proposed project; not shown in the budget is the \$350,000 previously expended by DPR for the planning and preliminary engineering, nor is the \$232,250 funded by CALFED for pre-construction services. Neither DPR nor DWR have funding for construction. O&M costs for the constructed habitat, which are expected to be minimal, will be cost shared by DPR within the context of its overall O&M responsibility for the SRA. The O&M costs are not shown in the budget.

DWR's Delta Levee Rehabilitation Program may provide about \$350,000 towards funding Task 1.03 Construction Management, by grant, or in-kind engineering services. The status of the Program and its Budget at the time the project goes to construction will be determining factors. DWR's participation in the project is with the understanding that net long-term aquatic habitat improvements will be credited to the Levee Rehabilitation Program consistent with DWR's contribution.

The Phase II items of work to be contracted out are:

Construction - recommend competitive Bid Solicitation using State (DWR) construction contract procurement procedures.

Construction Management Services - recommend using state (DWR) engineering staff, as alternative to MNE if construction management is provided by in-kind DWR Contribution.

Ecological and Biological Monitoring Services - recommend sole source subcontract with Jones and Stokes Associates based on unique qualifications.

b. Schedule Milestones

A Schedule is presented on Exhibit IV.

Payment requests for work progress will be submitted together with the proposed technical/financial reports on a monthly basis during construction and monitoring.

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

c. Third Party Impacts

Third party impacts have been identified for:

Neighboring Island Flood Protection - beneficial impact on local reclamation districts due to wave sheltering that will reduce levee vulnerability and maintenance; also beneficial impact on State because its liability exposure arising from waves generated on Franks Tract SRA will reduce.

SRA Recreationists - net beneficial impact on boaters, hunters and fisherman due to ecosystem restoration, although loss of some deeply flooded habitat will possibly concern bass fishermen.

State Water Agencies - beneficial impact due to reduced risk of levee failure on neighboring islands and the adverse impacts that such a levee failure would have on Delta water quality.

Based on the public participation process conducted by DPR during the planning and preliminary engineering for the project, the project appears to be self mitigating with no known opposition. The environmental certification and permit process should provide sufficient opportunity for public interest and resource agency review of this project.

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

APPLICANT QUALIFICATIONS

a. Moffatt & Nichol Engineers

Restoration of wetlands requires expertise in various engineering disciplines. A feasible design draws from the experience of civil and hydrologic engineers, combined with wetland biologists and coordinated with the resource agencies to form a workable solution.

Key elements involved in a wetlands project include dredging and disposal plan, vegetation plan, utility relocation, hydraulics, and culvert design. Moffatt & Nichol Engineers has experience in each of the areas and includes the development and application of hydrodynamic and water quality modeling. Models have been developed and calibrated in wetlands specifically for the design of wetlands. Modeling using accurate dynamic algorithms and prototype data are invaluable aids in the design process.

Moffatt & Nichol Engineers provides a wide range of services, with one of the largest coastal engineering staffs in the United States, complemented by an experienced civil and hydrologic engineering staff, the firm is capable of handling large and diverse wetlands restoration projects. We have a rapport with resource agencies and have worked with the leading biologists in the area to study and design wetlands. Wetland restoration is a service which Moffatt & Nichol Engineers provide with the same dedication that has earned us national recognition as a leader in waterfront facility design for over 50 years. Representative project experience includes:

Franks Tract State Recreation Area. Moffatt & Nichol Engineers developed preliminary engineering documents for an island demonstration project that will restore wildlife habitat, provide wave protection benefits, and increase the recreational land base at the flooded 3,300 acre Delta tract.

Pierce Island Wetlands Habitat Restoration. Moffatt & Nichol Engineers managed the environmental certification process, obtained required permits and prepared plans, specifications and estimates for wetlands habitat restoration at Pierce Island. Approximately 100,000 cubic yards of dredged material was used to cover abandoned sewage treatment lagoons on the island. The project provided for partition of the 74 acre island into a wetland habitat mitigation area and a dredged material management area.

Batiquitos Lagoon Enhancement Project. Moffatt & Nichol Engineers refined concepts and developed construction documents with cost estimates to return

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

Batiquitos Lagoon to a productive estuary. The project included the creation of a tidal inlet, the construction of two jetties, protection of five bridges and a dredging program in the lagoon to restore the tidal prism, which will promote a stable ocean entrance, provide the desired water quality, and create specific subtidal and intertidal areas.

Bolsa Chica Wetland Restoration. Moffatt & Nichol Engineers developed a wetland restoration plan for over 900 acres of coastal wetlands. Tidal water flow through the wetlands was determined using specialized hydraulic engineering and numerical models. Various tide control structures were designed to provide the desired flow conditions and to restore the wetlands.

Laguna Grande and Roberts Lake Restoration. Moffatt & Nichol Engineers provided preliminary engineering, and final design for the restoration of the lakes, near Monterey, CA. Restoration required dredging and disposal of over 120,000 cubic yards of accumulated lake sediments, and excess vegetation that choked the once open waters of the lakes. It also included creek channel improvements, construction of waterfowl islands, fishing piers, observation platforms and trails.

Anaheim Bay Mitigation Moffatt & Nichol Engineers developed a wetland restoration plan for 117 acres in Anaheim Bay. The project was required to replace critical habitat lost in San Pedro Bay because of port development. The mitigation plan created various types of wetlands and submerged lands, as specified by resource agencies.

b. **Jones & Stokes Associates (Recommended Environmental Subconsultant)**

Comprehensive Environmental and Habitat Restoration Experience. The Jones & Stokes Associates Team is experienced in environmental restoration, including planning, design, and construction. Team members have worked together on numerous projects. Our greatest ability is to integrate restoration opportunities with flood control designs to achieve both flood control protection and environmental restoration. The Jones & Stokes Associates Team provides multidisciplinary services to meet the objectives of natural resource management, habitat restoration and mitigation, and environmental compliance and permitting. Our Team has acquired extensive experience in restoring riparian systems and wetland communities by designing, implementing, maintaining, and monitoring restoration projects throughout California. We have developed a habitat restoration philosophy that is a systems-based approach, integrating the vegetation and wildlife resources of the restored habitat into the surrounding landscape and connecting watersheds. We have been involved with creating and restoring over 1,100 acres

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

of wetlands and riparian communities in the last 6 years.

c. Project Principal Personnel

Richard B. Dornhelm, P.E. The principal in the project for MNE is Mr. Dornhelm. He brings more than 30 years of specialized experience in engineering for coastal and riverine construction, including numerous wetlands habitat restoration projects. As Project Manager, Mr. Dornhelm has directed many multidisciplinary projects requiring progressive team organization and supervision, and stringent project budget and schedule controls. His understanding of the complex project permit and approval process has honed his ability to build consensus for project implementation. His years of experience in the preparation of engineering plans, specifications and estimates has been a major factor in the successful implementation of the projects he has managed.

Ronald Brean. The primary principal in the project for DPR is Mr. Brean. He is currently the District Superintendent for DPR's Gold Rush District, which includes the Delta park units. Mr. Brean has nearly 27 years experience in managing natural and cultural park units throughout California and has an educational background in zoology with an emphasis on wildlife management. District staff resources available to Mr. Brean include a State Park Resource Ecologist, park maintenance personnel, and ranger staff.

Curt Schmutte. The principal in the project for DWR is Mr. Schmutte. He previously led the System Integrity component for the CALFED program and has implemented difficult Delta levee, habitat, and barrier projects. As program manager for the CALFED Levee and Channel Technical Team, he was responsible for successfully developing the vision, plan, organization, process and schedule for this very important component. As manager of DWR's SB 34/AB 360 program, he has managed over \$30 million in Delta levee improvement projects including difficult mitigation elements. Mr. Schmutte has also managed subsidence studies and pilot projects with the Long-Term Management Strategy program to study the viability of using San Francisco Bay dredged material on Delta levees. He has a thorough knowledge of the Delta, and is currently managing two Category III Habitat Development/Restoration projects. He has worked on projects at Franks Tract SRA in connection with levee protection for neighboring islands.

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING**

COMPLIANCE WITH STANDARD TERMS AND CONDITIONS

Proposal Forms required of Moffatt & Nichol Engineers for Services/Private
Contracts follow this page.

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 or use this form for certification and sign. (See Appendix A of Subpart D of 43 CFR Part 12.)

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

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

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

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

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

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

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

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

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

OI-2010
 June 1998
 (Title from regulations OI-1002, OI-1004,
 OI-1005, OI-1006 and OI-1007)

PART C: Certification Regarding Drug-Free Workplace Requirements

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

Alternate I. (Grantees Other Than Individuals)

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

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

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

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

Moffatt & Nichol Engineers

3000 Citrus Circle, Suite 230

Walnut Creek, CA 94598

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

PART D: Certification Regarding Drug-Free Workplace Requirements

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

Alternate II. (Grantees Who Are Individuals)

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

01-2010
June 1986
(This form replaces OI-1053, OI-1054,
OI-1055, OI-1056 and OI-1043)

PART C: Certification Regarding Drug-Free Workplace Requirements

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

Alternate I. (Grantees Other Than Individuals)

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

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

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

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

Moffatt & Nichol Engineers

3000 Citrus Circle, Suite 230

Walnut Creek, CA 94598

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

PART D: Certification Regarding Drug-Free Workplace Requirements

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

Alternate II. (Grantees Who Are Individuals)

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

DR-2010
June 1996
(The form replaces DR-1983, DR-1984,
DR-1986, DR-1988 and DR-1992)

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

Richard B. Dornhelm

TYPED NAME AND TITLE Richard B. Dornhelm, Vice President

DATE July 2, 1998

DI-2010
June 1996
(This form replaces DI-1992, DI-1964,
DI-1956, DI-1965 and DI-1991)

EXHIBITS

I-010084

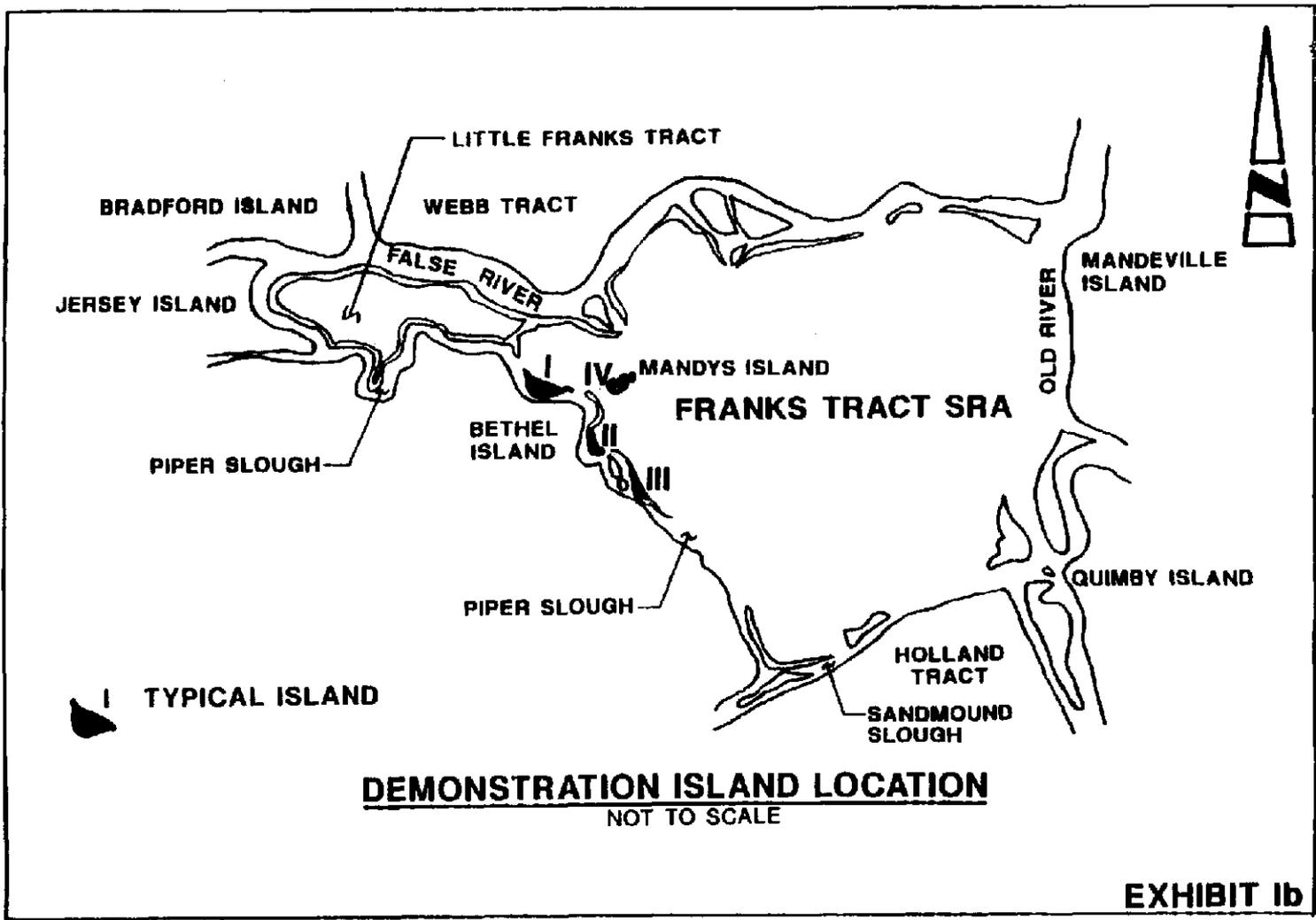


EXHIBIT Ib

I-010084

ERPP OBJECTIVES
PHASE II: DEMONSTRATION ISLAND CONSTRUCTION AND MONITORING

ERPP OBJECTIVES			
SECTION	OBJECTIVE	PAGE	VOL.
Ecological Process Visions – Bay Delta Aquatic Foodweb	<ul style="list-style-type: none"> • Increase the amount and diversity of organic matter input from Bay-Delta Watershed by restoring aquatic, riparian and wetlands habitats. 	60	1
Ecological Process Visions – Midchannel Islands and Shoals	<ul style="list-style-type: none"> • Install structures to weaken the force of waves to reduce midchannel erosion in sensitive areas. 	87	1
Ecological Process Visions – Fresh Emergent Wetland	<ul style="list-style-type: none"> • Increase land elevations in the interior of Delta islands where subsidence has lowered land elevations below tidal emergent wetlands. • Use substrate materials to create levee berms at elevations necessary for fresh emergent vegetation. 	97	1
Visions for Reducing or Eliminating Stressors – Dredging and Sediment Disposal	<ul style="list-style-type: none"> • Coordinate all actions closely with federal, State and local agencies charged with regulating dredging activities in the Bay-Delta. • Maximize the reuse of dredged materials for habitat restoration and other beneficial uses and minimize the amount of disposed material that is subject to resuspension and subsequent dredging. • Support continued research on sediment transport and deposition, sediment quality and toxicity testing, the environmental effects of suspended sediment and contaminants, and the beneficial reuse of dredged materials so that dredging and sediment disposal management will continue to improve. 	23B	1
Sacramento-San Joaquin Delta Ecological Zone – Perennial Aquatic Habitat	<ul style="list-style-type: none"> • Increase the area of shallow-water and intertidal mudflat habitat to improve conditions that support increased primary and secondary productivity; provide rearing and foraging habitat, and escape cover for fish; and provide foraging and resting habitat, and escape cover to water birds. 	43	2
Sacramento-San Joaquin Delta Ecological Zone – Midchannel Islands Shoals	<ul style="list-style-type: none"> • Protect and enhance existing remnant channel islands in the Delta. Prioritize island restoration starting with those that have greatest chance to be maintained by restored streamflow patterns, hydraulic conditions, sediment transport, and other restored ecosystem processes. 	45	2
Sacramento-San Joaquin Delta Ecological Zone – Fresh Emergent Wetland Habitat (Tidal)	<ul style="list-style-type: none"> • Protect and enhance existing wetlands by restoring tidally influenced freshwater emergent wetland in the Delta to: <ul style="list-style-type: none"> Provide high-quality habitat for waterfowl, shorebirds, and other associated wildlife; Provide rearing, foraging, and escape cover for fish; and Expand the populations and ranges of associated special-status, federally listed, and State-listed plant and animal species. • This will help to restore and maintain the ecological health of the aquatic resources in and dependent on the Delta. 	46	2

EXHIBIT II

I-010085

I-010085

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASES II: DEMONSTRATION ISLAND CONSTRUCTION & MONITORING**

Prepared for: CALFED
Prepared by: Moffatt and Nichol Engineers
Submitted: July 2, 1998

Budget Summary

Task No.	Task/Subtask Description	Direct Labor Hours	Total MNE	Service Contracts	Material and Acquisition Contracts	Miscellaneous and other Direct Costs	Task Total
1.00	Construction						
1.01	Solicit Bids	48	\$ 5,000	\$ 16,000			\$ 21,000
1.02	Construction				\$ 4,250,000		\$ 4,250,000
1.03	Construction Management	5500	\$ 556,000				\$ 556,000
1.04	Construction Support			\$ 42,000			\$ 42,000
	TOTAL Construction	5548	\$ 561,000	\$ 58,000	\$ 4,250,000	\$ -	\$ 4,869,000
2.00	Ecological and Biological Monitoring						
2.01	Pre-construction			\$ 8,000			\$ 8,000
2.02	Construction			\$ 18,000			\$ 18,000
2.03	Post-construction			\$ 27,000			\$ 27,000
2.04	Environmental Support			\$ 49,000			\$ 49,000
	TOTAL Monitoring	0	\$ -	\$ 102,000	\$ -	\$ -	\$ 102,000
	TOTAL PROJECT COST	5548	\$ 561,000	\$ 160,000	\$ 4,250,000	\$ -	\$ 4,971,000

EXHIBIT III

1-010086

1-010086

**Project Franks Tract State Recreation Area Wetlands Habitat Restoration
Phase II: Demonstration Island Construction & Monitoring**

ID	Icon	Task Name	1999			2000				2001				2002				2003				2004				
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		
1		1.00 CONSTRUCTION	[Redacted]																							
2	[Icon]	1.01 Solicit Bids	[Redacted]																							
3	[Icon]	1.02 Construction	[Redacted]																							
4	[Icon]	1.03 Construction Management	[Redacted]																							
5	[Icon]	1.04 Construction Support	[Redacted]																							
6		2.00 Ecological and Biological Monitoring	[Redacted]																							
7	[Icon]	2.01 Pre-Construction	[Redacted]																							
8	[Icon]	2.02 Construction	[Redacted]																							
9	[Icon]	2.03 Post-Construction	[Redacted]																							
10	[Icon]	2.04 Environmental Support	[Redacted]																							

I - 0 1 0 0 8 7

Project: Franks Tract SRA Wetlands
Habitat Restoration Phase II: Demons
Island Construction & Monitoring

Task [Redacted]
Progress [Redacted]
Milestone [Redacted]
Summary [Redacted]

Rolled Up Task [Redacted]
Rolled Up Milestone [Redacted]
Rolled Up Progress [Redacted]
External Tasks [Redacted]

Project Summary [Redacted]
Split
Rolled Up Split

Date: Wed 7/1/98

EXHIBIT IV

I-010087

**FRANKS TRACT STATE RECREATION AREA WETLANDS HABITAT RESTORATION
PHASES II: DEMONSTRATION ISLAND CONSTRUCTION & MONITORING**

Prepared for: CALFED
Prepared by: Moffatt and Nichol Engineers
Submitted: July 2, 1998

Tasks Summary

Task No.	Task/Subtask Description	LEAD	DELIVERABLE
1.00	Construction		
1.01	Solicit Bids	DWR	PROGRESS REPORT
1.02	Construction	DWR	PROGRESS REPORT
1.03	Construction Management	MNE	PROGRESS REPORT
1.04	Construction Support	DWR	PROGRESS REPORT
2.00	Ecological and Biological Monitoring		
2.01	Pre-construction	JSA	FINAL REPORT
2.02	Construction	JSA	ANNUAL REPORT & FINAL REPORT
2.03	Post-construction	JSA	ANNUAL REPORT & FINAL REPORT
2.04	Environmental Support	JSA	ANNUAL REPORT

EXHIBIT V

**FRANKS TRACT STATE RECREATION AREA WETLANDS
HABITAT RESTORATION
PHASE I: PRE-CONSTRUCTION SERVICES
CALFED # 97 N12**

MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING is entered into this 26th day of June, 1998, by and between **DEPARTMENT OF PARKS AND RECREATION, STATE OF CALIFORNIA**, hereinafter referred to as "DPR", **DEPARTMENT OF WATER RESOURCES, STATE OF CALIFORNIA**, hereinafter referred to as "DWR", and **MOFFATT & NICHOL ENGINEERS**, hereinafter referred to as "MNE." DPR, DWR and MNE collectively may be referred to as "Parties". This Memorandum is entered into with respect to the following facts:

- A. Franks Tract State Recreation Area ("SRA"), located in Contra Costa County, consists of two flooded Delta tracts totaling approximately 3300 acres owned by the State of California and operated by the DPR.
- B. In 1990, DPR contracted with MNE to prepare an engineering Feasibility Study of constructing a number of islands to bolster the fish and wildlife resources of the SRA, serve as effective wave barriers to help protect the levees of neighboring islands, and expand the SRA's land base for recreational uses, in accordance with the goals of the General Plan for the SRA.
- C. The MNE study identified numerous opportunities for island construction, and demonstrated the feasibility of obtaining and placing material to form islands that would meet the General Plan goals. Due to DPR funding constraints, the study recommended limited construction of demonstration islands along Piper Slough only; the islands were never constructed for lack of funding.
- D. The Parties submitted a joint proposal to the CALFED Bay Delta Program ("CALFED") on July 28, 1997 for funding of a phased project to construct the demonstration islands in Franks Tract SRA.
- E. The first phase of this effort consisting of completion of the CEQA environmental review and permit process, and preparation of construction documents has been funded through a \$231,500 grant from CALFED, authorized in the November 1997 funding cycle.
- F. In 1996 the Legislature enacted SB 900 and voters of California approved Proposition 204, the Clean, Safe, Reliable Water Supply Act of 1996 (the Act). The Act appropriates a total of \$25 million to DWR for the Delta Levee Rehabilitation Program. The Act requires that expenditures from this appropriation be consistent with a net long-

EXHIBIT VI

term habitat improvement program, and have a net benefit for aquatic species in the Delta. The Department's participation in this project is based upon the general agreement that net long-term aquatic habitat improvements will be attributed to the Levee Rehabilitation Program consistent with DWR's financial contribution.

IT IS AGREED AS FOLLOWS:

1. DPR and DWR intend to support MNE's implementation of the recommendations in the MNE study pertaining to the demonstration islands that provide primary benefits to fish and wildlife resources, and help to protect the levees of neighboring islands.
2. MNE shall enter into a contract with CALFED for implementation of the funded work, identified as CALFED Contract Number 97-N12, Franks Tract Restoration.
3. MNE will use good faith efforts to complete the CEQA environmental review and permit process utilizing the services of Jones & Stokes Associates, Inc., an environmental consulting firm. MNE will prepare construction documents to enable solicitation of competitive bids for the construction phase under State procurement regulations in subsequent phases of work.
4. DPR will use good faith efforts to assist the completion of the CEQA environmental review and permit process by serving as lead agency for environmental certification, and applicant for all permits
5. The Parties shall use good faith efforts to submit a joint proposal to CALFED for funding of the remaining phases of the project, including construction and post-construction monitoring of the islands, when CALFED invites proposals for the next funding cycle.
6. This Memorandum may not be modified without written approval of the Parties.
7. This Memorandum shall not be considered a contract or to be binding and may be terminated at any time by any of the Parties through written notification.
8. This instrument contains the entire agreement between the Parties hereto with respect to the transactions contemplated herein.

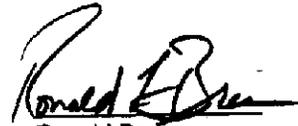
EXHIBIT VI

Franks Tract State Recreation Area Wetlands Habitat Restoration
Phase I: Pre-Construction Services
Memorandum of Understanding
Page 3 of 3

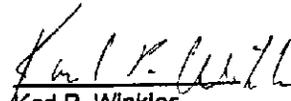
9. An Advisory Committee will be established to provide guidance and oversight of the project team. The Advisory Committee shall consist of those individuals identified in Article 10 of this Agreement.

10. All notices, requests, or other communications hereunder shall be in writing and shall be deemed to be duly given if personally delivered, sent by facsimile, or mailed to the Parties as follows:

Ronald Brean
Gold Rush District
Department of Parks and Recreation
101 J Street
Sacramento, CA 95814
Tel: (916) 445-7373
Fax: (916) 327-8872


Ronald Brean
6/30/98
Date

Karl P. Winkler
Chief, Central District
Department of Water Resources
3251 S. Street
Sacramento, CA 95816
Tel: (916) 227-7566
Fax: (916) 227-7600


Karl P. Winkler
6/30/98
Date

Richard B. Dornhelm, P.E.
Moffatt & Nichol Engineers
3000 Citrus Circle, Suite 230
Walnut Creek, CA 94598
Tel: (925) 944-5411
Fax: (925) 944-4732


Richard B. Dornhelm
6/30/98
Date

11. This Memorandum may be signed in counterparts; each of which will be considered an original and which together will constitute one and the same agreement.

EXHIBIT VI